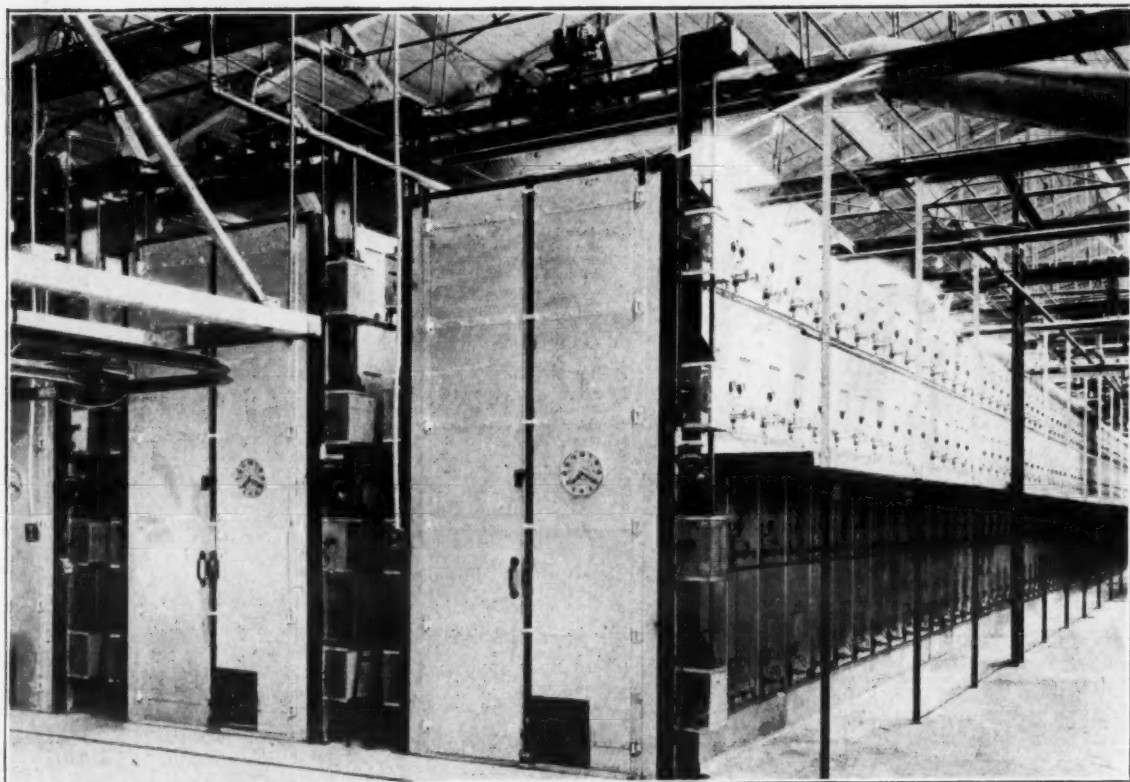


Line Production in Dehydration



Large dehydrating ovens installed in the Grigsby-Grunow plant by the Despatch Oven Co.

MAJESTIC DRYING OVENS HANDLE 600 UNITS EACH

(Concluded from Page 1, Column 2) the elevating section to the oven conveyor.

The ovens are loaded at the rate of 3½ units a minute. When an entire length of a conveyor system is loaded to its capacity of 75 condensing units, an operator opens the hand holes and attaches the vacuum connection to each unit through the hand holes along the oven. An individual gauge on each line is used to check the vacuum, and to detect any leaks which might exist.

The pumps pull a vacuum within two inches of absolute zero pressure, the engineers claim. Temperatures within two degrees of 180° F. are maintained for a period of 24 hours. Moisture content after dehydration is less than .0012 per cent, according to the Grigsby-Grunow officials.

Since the vacuum maintained varies with changes in atmospheric pressure, barometric readings are made every half hour, and checked against a recording instrument.

After dehydration, the units are sealed and dismounted from the vacuum lines. At the discharge end of the oven an unloading machine, similar to the loader, transfers them to a monorail conveyor which carries them to another department, where they are charged with sulphur dioxide, sealed, and tested.

A force of seven men operates the four ovens, three working at the loading end, and four at the unloading end.

Each oven is 152 ft. long, 4 ft. 7 in. wide, and 12 ft. 2 in. high. They are constructed of structural steel framework fabricated from angles and T-sections which support the oven panels, conveyor systems, trucks, and their loads. Double reinforced wall panels, two inches thick, and packed with rock wool insulation, serve to retain the heat in the ovens.

Each oven has 600 8x8-in. hand holes with slide doors for the vacuum lines. Bristol vapor tension thermostats, operating in conjunction with a relay and motor-driven valve in the gas supply line, were installed to control the heat to within two degrees of 180° F.

The heating system for each oven consists of a Furkert induced draft air heater, gas fired, with a fan for forcing the heated air into the graduated heat ducts inside the ovens. The heater itself is located atop each oven. The average fuel consumption of each oven is 700 cu. ft. of 525 B. t. u. gas per hour, Majestic engineers report.

Ventilation of the ovens is accomplished by means of a recirculating sys-

tem. Each oven is provided with interior duct work connected to the heaters. Air drawn from the oven is returned to the heater for a temperature rise of a few degrees, and forced back into the oven.

The fans move approximately 10,000 cu. ft. of air per minute, which means that all the air in an oven is reheated

NATIONAL SAFETY COUNCIL TO MEET IN CHICAGO

(Concluded from Page 1, Column 4) ing on "Safe Practices in the Operation and Maintenance of Refrigeration Plants." "The Economy of Good Surgery" will be discussed by Dr. C. R. G. Forrester of Chicago.

T. A. Adams of the Manhattan Refrigerating Co. of New York City will open the last session of the refrigeration section with his views on "Safety Measures in Cold Storage Power Plants," followed by a round table discussion on "Safety at the Platform."

"Cold Storage" is the subject of the next speaker, W. M. O'Keefe, executive secretary, cold storage division, American Warehousemen's Association, Chicago. Then Paul R. Pearson, general manager of ice operations for the Consumer's Co., Chicago, will talk on "Ice." He will be followed by A. L. Blatti of the Railways Ice Co., Chicago, on "Car Icing."

"The Conference Method of Safety Instruction" is the topic of the last address of the sectional meetings. It will be discussed by O. H. Day, director of vocational education of the Kansas City, Mo., public schools.

once a minute. New air for the system is supplied by natural draft stacks with damper controls for controlling the amount of air being removed. The usual setting is for five air changes an hour.

Eight independent conveyors move through each oven, each consisting of a double track on which the machine-loaded trucks are conducted through by means of a chain with lugs to engage the trucks.

The conveyor systems are arranged in four levels, with two parallel systems on each level. Motive power is furnished by an electric motor operating with a variable speed transmission and a gear reduction unit. Each of the eight conveyors has an independent control clutch. The electric motor for each drive can be started or stopped from any loading level through a remote control switch.

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THEY MUST BE RIGHT

ON fittings such as these rests the satisfactory operation of automatic refrigeration... they must be right in every detail.

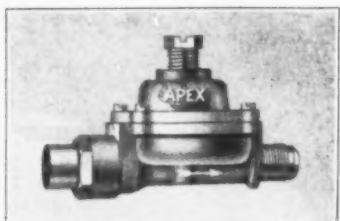
Commonwealth fittings are especially designed to meet the exacting requirements of the Automatic Refrigeration industry... they are accurately machined; they are seepage-proof; thoroughly inspected; and protected in shipping.

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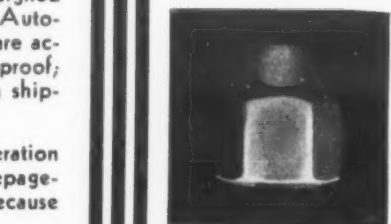
COMMONWEALTH BRASS CORPORATION
COMMONWEALTH AT G. T. R. R.
DETROIT



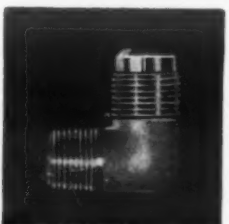
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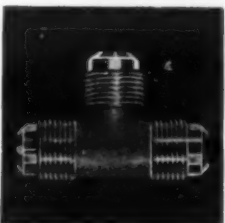
APEX REGULATOR COMPANY
Division of
FISHER GOVERNOR COMPANY
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Forged Nuts from hot slugs make extremely strong unions



Elbows are uniformly strong—of close grained forged brass



Threads are cut to S.A.E. No. 2 (medium fit) standards

OCEAN WATERS USED TO COOL YACHT CONDENSERS

(Concluded from Page 1, Column 5) ter, refrigeration manager for New Haven Electric.

"Due to the intense heat," Mr. Ganter explained, "the efficiency of the unit was reduced considerably. To overcome this condition we built a water-cooled condenser consisting of 15 ft. of ½-in. standard weight copper pipe. This was run on the underside of the hull in the corner next to the keel, which gave ample protection without any sort of covering."

"The result of this arrangement was to reduce the running head pressure from 70 lbs. to approximately 40 lbs. per sq. in. This in turn resulted in a saving of current—a very important factor since the current is furnished by storage batteries," he concluded.

The cooling unit is a Standard Copeland "Coldhold," the equivalent of a 6-cu. ft. cabinet.

Metal Stampings Unit Bases and Guards

Household Refrigerator Metal Panels—Exterior or Interior Panels and Food Compartments. Louvered Panels—Special Trays or Panels—Water Cooler Panels.

MOTORS METAL MFG. CO.
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Made for all makes, models and sizes of automatic refrigerators. One size of both pad and harness takes care of many sizes of refrigerators. Illustration shows style L, harness adjustable for refrigerators with legs. For models without legs see our style F. The most sturdy, simple and inexpensive unit made. Adopted by the leading manufacturers. Make of refrigerator lettered in brilliant design. Write for special booklet.

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not a crack, a flaw, a weak spot—not a chance for corrosion, for scale. Work it any way—swedge, flare, bend—it is perfect and stays that way. For refrigerants, water, air, oil—the cheapest—and best.

Dehydrated and Sealed Coils

Especially prepared for immediate use in all refrigeration uses. A. S. T. M. specifications (B68-30T). Rush orders from stock.

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ELECTRIC REFRIGERATION NEWS

Registered U. S. Patent Office.

The business newspaper of the refrigeration industry

ISSUED EVERY WEEK
VOL. 6, No. 4, SERIAL No. 132

Copyright, 1931, by
Business News Pub. Co.

DETROIT, MICHIGAN, SEPTEMBER 30, 1931

Entered as second class matter
Aug. 1, 1927, at Detroit, Mich.

TEN CENTS PER COPY
TWO DOLLARS PER YEAR

WESTINGHOUSE TO LAUNCH TRAVEL CONTEST OCT. 12

Company Makes Plans For 'On-to-Mansfield' Expedition

MANSFIELD, Ohio, Sept. 28—Westinghouse Electric and Mfg. Co. will announce, at a distributors meeting here Oct. 1, at the completion of their nationwide "Build-A-Refrigerator" contest, a new national competition.

The new contest which will start Oct. 12 and close Dec. 12, will be known as the Westinghouse refrigerator "On-to-Mansfield" expedition, and every Westinghouse refrigerator salesman and supervisor is an explorer.

For every dollar's worth of refrigerator sold, each retail salesman-explorer will progress one mile on the path toward Mansfield, each apartment house salesman one-fourth mile, each retail supervisor one-fourth mile and each apartment house supervisor one-sixteenth mile.

Miles of progress on the mythical journey will be the basis for merchandise prize awards, and bonus miles will be awarded at three different points along the way.

The leading salesman in each of the nine sales districts will be awarded a free trip to merchandise headquarters at Mansfield. These nine men will become charter members of a championship Westinghouse sales club, a permanent national organization for the Westinghouse salesmen who have shown superior selling ability.

In addition, a grand prize of a Westinghouse refrigerator will be awarded to the leading salesman in the nation during the contest. Second prize will be a Westinghouse radio.

Sales districts in this contest will be designated as armies, distributors will be divisions, and dealers, companies. The divisions will compete against each other during the contest, and the division which sells the greatest percentage of its sale quota will win the permanent possession of a large \$1,500 oil painting.

(Concluded on Page 4, Column 5)

G. E. APARTMENT MEN MEET AT CLEVELAND

CLEVELAND—Plans for an intensive fall sales campaign on General Electric refrigerators for apartment house installation were laid here recently at the 1931 Apartment House Managers' conference in the Refrigeration Institute.

The conference on Sept. 14 and 15 was held under the direction of J. J. Donovan, manager of the apartment house division of the department, and featured such speakers as Morris Bien, vice president of the Bankers Bond & Mortgage Co. of Philadelphia, Major Alfred W. Harris, Cleveland, national known architect, and P. B. Zimmerman, manager of the General Electric refrigeration department.

Mr. Bien, guest speaker at a banquet held the first night in Hotel Statler, described at considerable length the advantages of electric refrigeration.

(Concluded on Page 2, Column 4)

B. J. GRIGSBY ENDS TOUR OF EUROPEAN COMPANIES

NEW YORK—B. J. Grigsby, Chicago, president Grigsby-Grunow Co., arrived in New York Sept. 25 on the "Aquitania" after a month's sojourn in England and France.

Mr. Grigsby reported that the company's European concessionaires for Majestic products were making progress in spite of adverse economic conditions there. The parent company for European business is Majestic Electric Co., Ltd., of London.

This company, which is largely of British capital, pays a royalty to Grigsby-Grunow Co. on its products. The American firm has substantial interest in the organization. A subsidiary company, Majestic (France) Ltd., has already been organized, and agencies have been established in other countries, including Belgium, Italy, Spain, Denmark and Sweden.

Plan Chairman



MORRIS E. JACOBS

PLAN COMMITTEE TO BE HEADED BY JACOBS

NEW YORK—Morris E. Jacobs of the advertising firm of Bozell & Jacobs, Omaha, has been appointed chairman of the plan committee of the Electric Refrigeration bureau to succeed A. C. Watt of Commonwealth & Southern.

Mr. Jacobs has been connected with the advertising and public relations of the Nebraska Power Co. for many years and is an authority in the field of public utility work.

The new chairman of the plan committee was inducted into office at a plan committee meeting in Chicago, Sept. 16 and 17.

J. E. Davidson, president of Nebraska Power Co., is chairman of the Electric Refrigeration bureau of the National Electric Light association. The appointment of Mr. Jacobs, centers the bureau activities in Omaha.

Electric refrigeration week of the national bureau will start Oct. 3 and end Oct. 10, according to plans of the bureau.

The week's program covers a three-fold purpose which is to stimulate sales of electric refrigerators and to discover new prospects, to make a nation-wide impression on the public by means of exhibits conducted simultaneously across the country, to demonstrate the ability of central stations and other dealers in electric goods to work in complete harmony.

Local bureaus throughout the nation are planning refrigeration shows, at which food preservation will be the main theme. Cooking schools will be conducted in connection with the exhibitions.

COPELAND SALES IN AUGUST SHOW INCREASE OF 43%

Totals for Year 21% Above Figures to Date in 1930

MT. CLEMENS, Mich.—Consolidated sales of Copeland Products, Inc., and subsidiaries for Aug., 1931, showed an increase of 43.7 per cent over sales for Aug. 1930, Louis Ruthenburg, president of the company, announced Sept. 24.

The net increase in sales for the fiscal year to date is 21 per cent over the corresponding period of 1930.

"One of the outstanding features of our 1931 operations," Mr. Ruthenburg said, "is the fact that both July and August broke all previous records for those months."

"This increase in sales is indicative of the growth of the entire industry and comes about through the general acceptance of electric refrigeration for both household and commercial purposes."

"The market for electric refrigeration will be augmented in 1932 with the introduction of room cooling equipment and gasoline-engine-driven equipment during the present year," he concluded.

BOHN PATENTS RULED INVALID BY U. S. COURT

ST. PAUL, Minn.—Upholding the ruling of the U. S. District Court of Minnesota that refrigerator doors constructed by the Seeger Refrigerator Co. do not infringe patents of the Bohn Refrigerator Co. as claimed in the suit brought by the Bohn organization, Judge Booth of the U. S. Circuit Court of Appeals has just ruled that the Bohn patents are invalid in view of earlier patent rights granted to Thomas P. Bolger for Seeger, and opined that the Bolger patents are not violated by Bohn door construction as the Seeger counterclaim alleged.

The object of both Seeger and Bohn patents is to separate the inside and outside metal coverings of the door and door openings with non-metallic materials.

Action was first started by the Bohn Refrigerator Co. in the district court with a suit alleging infringements by Seeger of its patents 1,263,843 and 1,329,453. Hearings disclosed that patent 1,209,544 had been granted to Thomas P. Bolger for Seeger before the Bohn patents were issued, and indicated prior knowledge of the art. In its answer, Defendant Seeger set up a counterclaim.

(Concluded on Page 4, Column 1)

500 Servel Contest Winners Are Honored at Convention

By George F. Taubeneck

EVANSVILLE, Ind., Sept. 29—(Special Wire to ELECTRIC REFRIGERATION NEWS)—All dressed up like Fourth of July was Evansville yesterday and today, as approximately 500 successful distributors, dealers, and salesmen romped into town to attend the first Servel Hermetic convention. Trains were met by the Servel concert band, a 40-piece organization recruited from the Servel

factory. Flags were flying; bunting decorated buildings and telephone poles. Welcome signs were plastered everywhere.

And the mood of the visitors, collectively and individually, matched the festive appearance of the city. Business sessions were held in Loew's Victory theater (appropriately, for this was a winners convention). Lunches, dinners, and the banquet were served in the Mc-

Servel Host



W. PAUL JONES

Servel Sales Promotion and Advertising Manager.

Sellman Promoted

EVANSVILLE, Ind.—F. E. Sellman, vice president in charge of sales of Electrolux Refrigerator Sales, Inc., has been appointed vice president in charge of sales of Servel Sales, Inc., it has been announced by H. H. Springfield, chairman of the board of Servel Sales, Inc.

Mr. Sellman will continue his duties with the Electrolux organization, and will also continue to act as consulting engineer for Servel Sales, Inc.

C. A. Miller, formerly assistant sales manager of Electrolux Refrigerator Sales, Inc., has been appointed sales manager of Servel Sales, Inc., succeeding V. E. Vining, who has been assigned to other duties.

Curdy hotel, which was also the scene of an absorbing pastime labelled "Monte Carlo" Tuesday afternoon.

Other stamping grounds were the Coliseum (where wrestling matches took place), the Servel plant (which was toured), and the Evansville Country Club.

(Concluded on Page 4, Column 4)

COYE NAMED GIBSON DIVISION SALES HEAD

GREENVILLE, Mich.—C. W. Coye, former assistant general manager of the Alaska Refrigerator Co., Muskegon, Mich., has been appointed sales manager of the electric cabinet division of the Gibson Refrigerator Co.

Mr. Coye has taken charge of the sales for the division of the local company.

During the war, the new sales manager served as industrial specialist with the Federal Forest Products Laboratory. He was secretary of the National Refrigerator Manufacturers' association at one time.

In 1925, Mr. Coye was appointed electric cabinet development engineer for Belding-Hall Co., Belding, Mich. Upon the organization of the Belding-Hall Electric Corp., he developed and was named manager of the sales promotion and advertising department.

Mr. Coye had charge of the engineering development and sale of electric cabinets with Alaska.

MILNOR PURCHASES G. E. FRANCHISE FROM F. P. LUTZ

DAYTON—(UTPS)—Sale of the business of F. P. Lutz, distributor for the General Electric refrigerator and General Electric heat regulator for Montgomery and 11 other counties for the past four years, to the Milnor Refrigeration Co. of Cincinnati was announced recently. The sale price was not made known.

Under the new arrangement, the Dayton distributorship of the General Electric products handled by Mr. Lutz will be discontinued. The present Dayton territory being added to the Cincinnati territory, the Milnor company being represented in Dayton by the R. R. Hollister Co.

Earl F. McClintock, who has been connected with the Lutz company since its beginning here as assistant general manager, will be associated with the Milnor organization.

T. K. QUINN ANSWERS CRITIC OF MODERN SPECIALTY SELLING

Scores Intolerant Attitude of College Professor

This following article, written exclusively for ELECTRIC REFRIGERATION NEWS by T. K. Quinn, vice president of the General Electric Co., presents an exceedingly clear picture of the service being rendered to society by the salesmen of modern labor-saving devices for the home.

As an inspirational message to these pioneers of better living standards it deserves to be bound in leather and stamped in gold.

As a satire on "educators" out of step with present-day thinking, it is choice reading.

Read it, then write something better—if you can.—Publisher.

By T. K. Quinn, Vice President,
General Electric Company

I have just seen an article by Prof. Lawrence H. Conrad of the State Teachers College at Montclair, N. J., with the derisive title "Porch Climbers."

The article first appeared in the April, 1931, issue of Forum, and was subsequently republished elsewhere. It is an unsympathetic and, I believe, intolerant statement of the case against aggressive salesmen of household devices who go direct to the homes of the country to effect their sales. The article makes no distinction among the men or the products or the principles they represent.

In precisely the same vein the professor might have written a tirade against salesmen who call at offices, or anywhere else, to peddle their wares—if he happens to be at all familiar with things commercial. There are, in fact, offensive people everywhere, but none of them are good salesmen.

From my viewpoint, his own statement loses force and carries less conviction because he is so obviously outraged and insistent. Of course, any-

(Concluded on Page 6, Column 3)

G. E. Managers Discuss Apartment Campaigns



Fall sales activities of General Electric refrigerator distributors were planned at a meeting of department managers in Cleveland, Sept. 14 and 15. J. J. Donovan, manager of G. E.'s apartment house division was in charge of the meeting which included a banquet on the program.

He got the Surprise of his life



One of the country's most prominent electrical refrigerator dealers was astounded when the new Combustioneer proposition was put up to him. Here's why: He found a stoker that is entirely automatic from coal feeding to ash removal. A *quality* product that maintains safe, steady heat—eliminates the smoke nuisance and provides a saving in fuel from 30% to 50%. A life-saver to industrial, apartment and home users of coal. And at a price that is the *lowest ever offered* for automatic heat equipment.

Further investigation showed that the time was ripe to get in on the ground floor in a new industry—to add a profit-

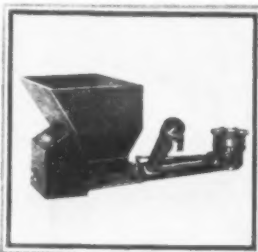
able fall and winter seller to his business.

He found Combustioneer automatic coal burner supported by a reliable, sound, manufacturing organization—a pioneer in a fast growing industry—backed by national magazine and newspaper advertising with scores of helpful selling aids. A Merchandising Manual unparalleled in the entire field of selling.

Combustioneer's dealer franchise carries with it a complete plan for getting business without lost motion, and quickly.

What more could any dealer ask?

We would like to talk with you about a profitable dealership.



TEN POINTS OF SUPERIORITY

1. Burns coal—the safe, reliable fuel, cleanly and economically.
2. Burns less quantities of coal and the lower priced sizes.
3. Thermostatic controls insure exact temperature regulation.
4. Increases boiler efficiencies.
5. Gives constant, even, steam pressures.
6. Eliminates smoke nuisance.
7. Absolutely safe.
8. Renders a distinct service to every user.
9. Thousands of installations prove that the public is hungry to secure the benefits of clean, automatic heat.
10. Automatic heat—at the lowest price ever offered.

COMBUSTIONEER, INC.

MAIN OFFICE:
GOSHEN,
INDIANA



BRANCHES:
CHICAGO
DETROIT

General Electric Apartment House Managers Plan Fall Sales

(Concluded from Page 1, Column 4)

advances made during the past three or four years in apartment house and hotel electric refrigeration in Philadelphia.

"In hundreds of instances our company, which directs the operations of about 22,000 pieces of property, has found that electric refrigeration is the key to the solution of vacant apartment houses and apartment hotels," Mr. Bien asserted.

He cited one instance in particular of two 12-suite apartments in which there were more than half a dozen tenants. "These apartments were in the same neighborhood with several other similar buildings all of which were for the most part only partially occupied," he said.

Demand Electric Refrigeration

"Our engineers made a careful survey of the two buildings and recommended the installation of individual electric refrigerators. This was done and within a comparatively short time all but two or three of the 24 suites were rented."

Mr. Donovan, who has made a study of apartment house refrigeration, said, "Realization by the tenant of the absolute necessity of dependable food preservation has brought about a situation now in which demands are being made upon the apartment house owner to furnish this protection at little or no extra cost."

Zimmerman Welcomes Group

"For this reason, if for no other, General Electric refrigerator distributors and dealers will install more apartment house refrigerators in the next few months than they have ever installed before in any similar period."

Manager Zimmerman, in his address of welcome to the apartment house managers, declared that the electric refrigeration industry is in better shape now than it ever has been. "1931 sales so far have been larger in general than last year and 1930 was a banner year in the industry."

Price Cutting Absent

"Sharp price cutting in other lines of business has not yet shown its influence upon manufacturers of electric refrigerators to any marked degree. It is easy for a buyer to purchase an electric refrigerator at too low a cost, and this is one evil that all of us should guard against. Tribute should be paid to other refrigerator manufacturers for not going wild on price reductions. No manufacturer or industry has ever succeeded on price alone."

"The future of electric refrigeration is bright and the saturation point is nowhere in sight. Education in the form of advertising is bringing more people each day to the realization of the absolute necessity of adequate refrigeration. Our forces, too, are helping the cause. The electric light and power industry is leading a movement to make America refrigerator-conscious, for the kitchens of this nation interest the power companies as they never have before."

Major Harris, who has designed hundreds of modern and ultra-modern apartment houses in Cleveland and other leading cities of the country,

stressed the importance of electric refrigeration in one sentence—"Building a modern apartment house today without electric refrigeration is like constructing a five or six-story building without an elevator."

He reminded the apartment house managers that contacting an architect is one of the most difficult problems there is unless the contact man comes directly to the point and tells his story briefly and efficiently.

"Architects of today," he said, "have no time for the salesman who wants to sit down and visit for an hour or two. This kind of a salesman might as well stay away, for his chances of influencing the architect to recommend his type of refrigerator are practically nil."

Walter Daily Speaks

Other speakers on the program included Walter J. Daily, advertising manager of the refrigeration department; G. D. Kobick, M. J. Young, A. A. Uhalt, Harold Hulett of Cleveland headquarters; William Crawford of the General Contract Purchase Corp.; William Burton, St. Louis; Frank Knott, Boston; Clinton Rood, Chicago; H. Blinsinger, Philadelphia; J. J. Massimi, New York, and Charles Muir, Schenectady.

Delegates to the conference included: A. E. Misericordi, St. Louis; J. N. Breed, Louisville; A. G. Muenzenmaier, Cincinnati; A. Shepard, Cleveland; H. C. Lauchman, Pittsburgh; H. A. Ritter, Dayton; C. M. John, Milwaukee; C. T. Shurmann, Indianapolis; E. B. Blondell, Baltimore; W. Wetherbee, Albany; Joseph L. Boudwin, Cleveland; C. V. Head, Syracuse.

W. A. Mauser, Hartford; M. C. Walker, Waterbury; T. F. Rodgers, Dallas; W. D. Jackson, Cincinnati; Frank F. Carson, Detroit; Kenneth W. Knott, Boston; James E. Morton, Pittsburgh; M. M. Heckman, Cleveland; A. S. Koser, Cleveland; J. L. Rippper, Cleveland; A. B. Judgo, Newark; W. Mosher, Atlantic City; George M. Oyster, Washington; B. M. Raborn, Oklahoma City; H. H. Smith, Akron; R. H. Sausaman, Cleveland, and A. Weingarden, Cleveland.

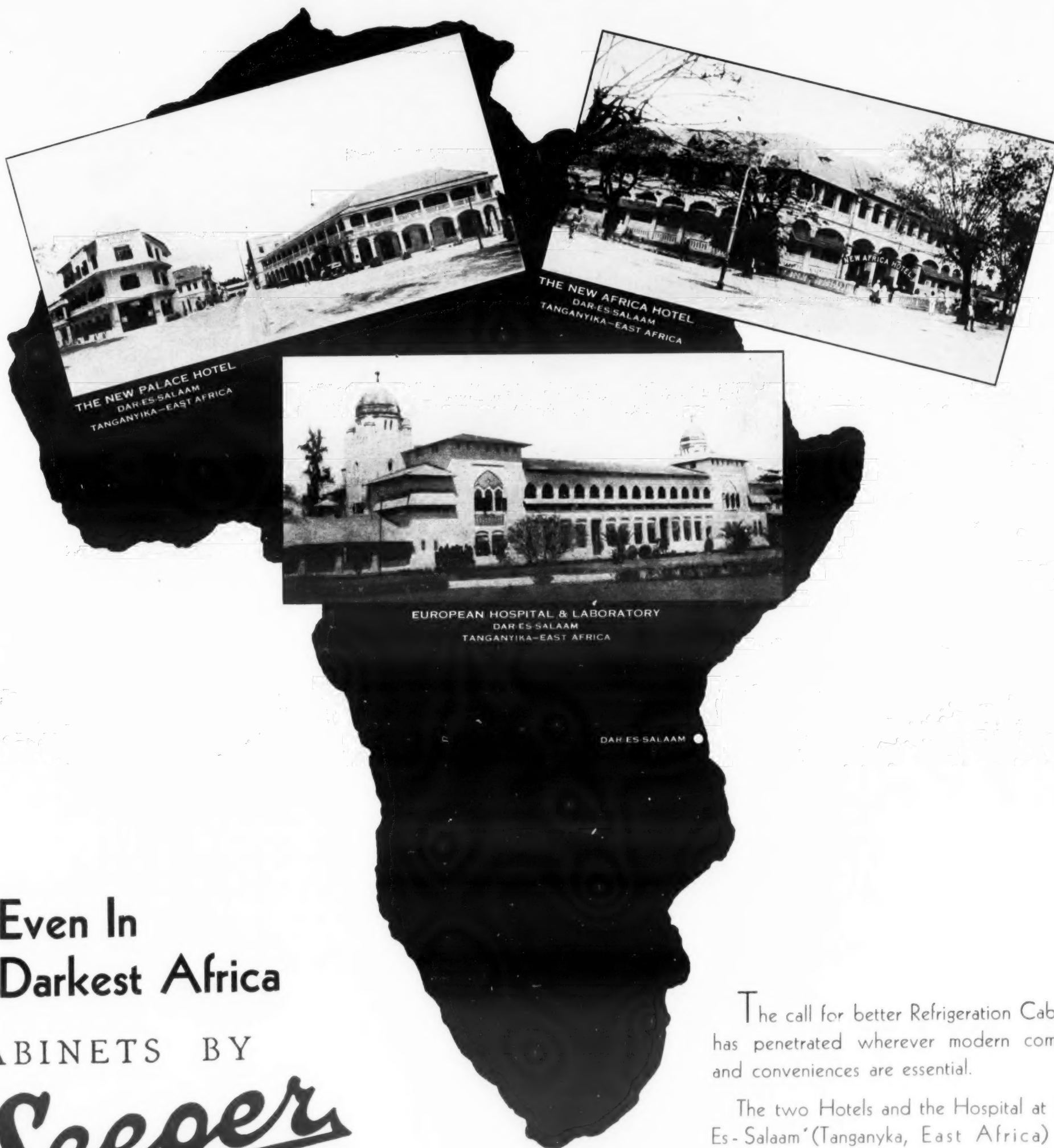
3 APARTMENT CONTRACTS FOR 201 G. E. UNITS SIGNED

PORTLAND, Me.—The Cumberland County Light & Power Co., of Portland, is filling an order for 201 model S-42 General Electric refrigerators, which will be installed in the Ambassador, Colonial, and Shepley, local apartment houses. The order was secured for the local dealer by Roy E. Holden, sales manager.

This is the largest order for electric refrigeration ever made on one contract in this section, in the opinion of officials of Gould-Farmer Co., Maine and Vermont distributor for General Electric.

Two carloads of the refrigerators are now being installed and the remainder of the consignment is expected in the near future.

These apartment installations will amount to slightly more than 1 per cent of the residential meters in Portland.



Even In
Darkest Africa

CABINETS BY

Seeger

SAINT PAUL

The call for better Refrigeration Cabinets has penetrated wherever modern comforts and conveniences are essential.

The two Hotels and the Hospital at Dar-Es-Salaam (Tanganyika, East Africa) are equipped with Cabinets by Seeger.

These installations were made through the Kelvinator Export Division.

SEEGER REFRIGERATOR COMPANY

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Fourth Ave. at 19th St.
NEW YORK, N. Y.

655-57 So. La Brea Ave.
LOS ANGELES, CAL.

Statler Building
BOSTON, MASS.

666 North Wabash
CHICAGO, ILL.

BOHN DOOR PATENTS HELD INVALID BY U. S. COURT

(Concluded from Page 1, Column 5)

The district court dismissed the plaintiff's bill for want of equity, ruled the Bolger patent valid, but not infringed by the plaintiff's particular construction, and dismissed the counterclaim for lack of equity.

The case was appealed to the U. S. Circuit Court of Appeals, eighth district, where Judge Booth ruled the Bohn patents invalid in light of Bolger's earlier patent, and held that the Bolger patent is not infringed by Bohn because the latter's construction involves a door which overlaps the cabinet for a tight fit, while the Seeger door fits flush with the cabinet. Moreover, he

6,154 Electrolux Sold In N. Y. Territory

NEW YORK—A new monthly sales record for the Electrolux refrigerators was established during August by the Consolidated Gas Co. of New York and its affiliated gas companies, according to an announcement made recently.

Orders for 6,154 refrigerators were received by the company during the month, as compared with 5,916 in July, the previous high month. Sales in August were 69 per cent ahead of Aug., 1930.

From Jan. 1 to Aug. 31, 1931, 27,008 gas refrigerators were delivered.

points out, the joints are sealed by different methods. Judge Booth's decision is published in full on page 11 of this issue of the News.

REPORT ON ROOM COOLING TO BE MADE AT GAS MEET

ATLANTIC CITY—F. J. Rutledge, vice president of the United Gas Improvement Co., Philadelphia, will give a report of house cooling by gas and summer air conditioning at the thirteenth annual convention of the American Gas Association, Oct. 12-16.

Twenty models of domestic and semi-commercial gas refrigerators will be exhibited in a stage display in the municipal auditorium by Electrolux Refrigerator Sales, Inc., New York.

The Carrier Weathermaker system of air conditioning for homes using gas fuel will be exhibited at the meeting by Carrier-Lyle Corp., Newark, N. J. American Radiator Co., Bristol Co., and Minneapolis-Honeywell Regulator Co. also will exhibit products.

500 Servel Contest Winners Honored At 2-Day Sales Convention

(Concluded from Page 1, Column 5)

club (where golf matches were played). Led by the Servel band, the conventioners swarmed into the Victory theater Monday morning, singing "Hail, Hail," "Back to Indiana," and other rousing ballads.

On the stage they saw an exhibit of Servel Hermetic refrigerators, and watched open-mouthed a piece of visual pyrotechnics with banners and drops staged by Paul Jones, advertising and sales promotion manager.

When the clamor had subsided long enough for the latter gentleman to get a word in edgewise, he introduced C. A. Miller, new sales manager of Servel Sales, Inc., who in turn acted as master of ceremonies.

Mayor Frank W. Gries traced the relationship of Servel to Evansville, and told the assembled Hermetic sales organization how much it meant to the city to have the Servel factory located in Evansville.

Springford Discusses Policies

Came next H. H. Springford, chairman of the board of Servel, Inc., who discussed policies and plans regarding the five major products of Servel, Inc. Hercules gas engines and motor trucks, Electrolux gas refrigerators, Servel Hermetic refrigerators, and Servel commercial refrigerating machines—in a speech entitled, "Our Company."

F. E. Sellman, vice president of Servel Sales, Inc., presented some of the new plans he has been formulating for the promotion of Servel Hermetic sales, and announced that the men now at the helm of Servel Hermetic had been among those who put Electrolux on the market.

"One out of every 10 automatic refrigerators sold during the first six months of 1931 was an Electrolux," averred Mr. Sellman. "But we expect the Servel Hermetic refrigerator to out-sell Electrolux three-to-one in the near future."

"The two products do not conflict. Each has its own place to fill, and we're going to see to it that they fill those places."

To Assist Representatives

District representatives will give assistance on sales, service, sales promotion, and advertising to distributors and dealers, Sellman declared. The Batten, Barton, Durstine & Osborne advertising agency, which handles the Servel account, will also help local sales organizations.

When a family, an institution, or an industry begins to "arrive" in this world, it begins to look for a pedigree. C. A. Miller, newly appointed Servel Hermetic sales manager, looked for and found a pedigree for the refrigeration industry in his talk, "Your Opportunity."

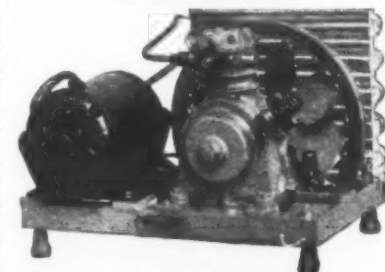
The discovery of refrigeration, he declared, marked the original unshackling of mankind from the bond of the animal—it started the process of thought.

Always before he had to kill the food he consumed each day; it would not keep. And then he discovered that food would stay palatable on some cold days.



—PRODUCTS—

A SERVICE TO THE REFRIGERATION INDUSTRY



Model 400, 1-6 H.P. Single Cylinder Condensing Unit

PRECISION BUILT COMPRESSORS and COMPLETE CONDENSING UNITS

for Electric Refrigeration Manufacturers, Distributors and Dealers

Our plan allows the assembler to advertise and sell under his own name.

Sizes for 1/6, 1/4 and 1/3 H. P. Also commercial sizes up to 3 H. P. Air and water cooled.

Sulphur dioxide and methyl chloride condensing units.

Ideal for domestic refrigerators, ice cream cabinets, water coolers and small commercial installations.

Prices lowest in the history of electric refrigeration.

Full details given on request.

Deissler Machine Company

Greenville, Pa.

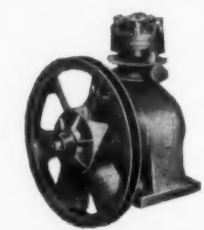
New York Office, 15 Moore Street

Manufacturers of complete domestic and commercial refrigeration systems

KULAIR Electrical Refrigerating Products

Simplicity, quality, efficiency and capacity unequalled. A size for every use.

Compressors from 95 Lbs. to 4300 Lbs. I. M. C.



NO. 1300 COMPRESSOR
Single Cylinder 1 1/2 x 1 1/2
300 to 425 R. P. M.

Condensing Units from Small Domestic to Large Commercial Capacities.

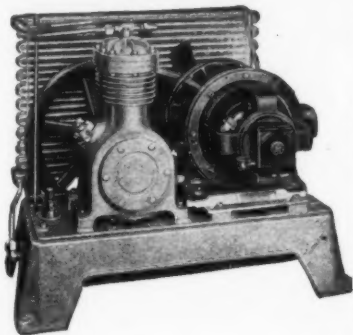
AIR COOLED WATER COOLED
METHYL CHLORIDE or SULPHUR DIOXIDE

POLICIES
PRODUCTS
PRICES

Providing Proper Profit To All Distributors.

WRITE FOR FULL INFORMATION TO

KULAIR CORPORATION PHILADELPHIA, PA.



QUICK TURNOVER + 40% PROFIT MAKES

Easy-Out

ALL-METAL TWIN ICE TRAY

a Real Money-Making Item



No water is needed to remove the ice from the Easy-Out. Just press down sharply on ends of grid. Lift out the grid and twist or flex it. If an abnormal freeing condition occurs, a dash of water on back of tray produces immediate results.

INTRODUCTORY TRIAL OFFER

To introduce the Easy-Out, all merchants who write us on their business stationery as proof of bona fide interest will be sent any size Easy-Out tray for \$1. This offer is limited to ONE TRAY per merchant. Give the name of the refrigerator and model you wish to try the tray in. Further information and discount lists will be sent to you with the trial tray.

INSTEAD of selling just a refrigerator, why not sell a **completely equipped** unit? Prospects seldom know the delivered price of refrigerators since it is different in one city than in another. And by quoting your delivered price to include Easy-Outs and other accessories as standard equipment, you sell a complete job and get **all** the profits. Otherwise, your customers may buy the accessories later from someone else.

Buying resistance is not materially increased. Who will even think of the few

dollars added cost in buying a refrigerator that sells for \$150 or more? And in this way you get the 40% profit on Easy-Outs and the profits on the other accessories, besides securing a faster turn-over of your accessory stocks.

It actually takes less effort to sell a completely equipped unit. You know that most sales are made on eye-appeal and you know that a refrigerator equipped with all its accessories is far better looking than just the bare unit. And more than one dealer is paying his rent with the profits made from his accessory sales.

Easy-Outs are the newest and most talked about accessory. Therefore their use as equipment in every refrigerator you sell actually helps the sale instead of offering added resistance. And don't forget that many a dealer is paying the cost of his free service calls by having his service men sell Easy-Outs.

Send in your order today.



COUNTER DISPLAY FREE! With every order for ten or more Easy-Out trays, this attractive counter display, in full color, will be sent free of charge. This display sells the Easy-Out through words and pictures and provides a sample tray that your customers may try.

REFRIGERATION
ACCESSORIES
DEPARTMENT OF

M'CORD

RADIATOR
& MFG. CO.
DETROIT, MICH.

He went further, cached some food in an ice cave in the hills. Soon he began storing his food that way.

With the necessity of procuring food each day relieved, he now had nothing to do. He began to experiment. Discovered he could ride a log across the lake. Discovered other things, and he began to think.

"But in spite of refrigeration's ancient antecedents," Mr. Miller pointed out, "women still use primitive methods of storing food. And it is the task of you gentlemen to rescue the womanhood of America from these outdated and inefficient forms of refrigeration."

Attacks Selective Selling

Mr. Miller attacked the idea of selective selling. No salesman, he maintained, was ever in a position to predetermine who would be a buyer.

Following a luncheon, the guests were herded through the Servel plant. This inspection trip occupied most of the afternoon.

At night, after dinner, the convention crowd attended en masse one of the wrestling shows for which Evansville is famous. A large block of ringside seats were reserved for the Servel men.

The last bout on the card was a match between a little fellow labelled "Servel Hermetic," and a big, hairy brute titled "Strangler Competition." The latter strutted into the ring wearing a high hat of Civil War vintage. The Servel Kid's first act was to knock off the high hat, evoking vast hurrahs from the crowd.

Then followed a rip-snorting wrestling match, with the "Strangler" using all the barred holds known to the science. "Servel Hermetic," of course, emerged victorious, and justice and clean sportsmanship again triumphed.

Tuesday morning was devoted largely to detailed discussions of the Servel retail selling program.

Jones Describes Tools

W. Paul Jones, advertising and sales promotion manager, opened the session with a talk on "Using Selling Tools."

He was followed by E. Harold Greist of Batten, Barton, Durstine & Osborne, Inc., who discussed "The Relation of Advertising to Selling."

"Retail Selling" was the topic elaborated upon by V. E. Vining of Servel Sales, Inc.

"The Refrigeration Industry—Today and Tomorrow," was the subject of a talk by George F. Taubeneck, editor of ELECTRIC REFRIGERATION NEWS. "Some Merchants Are Selling," presented by H. M. Vawter, New York manager of the *Saturday Evening Post*, concluded the program.

After the luncheon came golf and "Monte Carlo."

At the banquet Tuesday night, Col. F. E. Smith, president of Servel, Inc., bid "Godspeed" to all present.

Gus Dyer, editor of the *Southern Agriculturalist*, expanded in humorous fashion to pull the curtain down on the show.

WESTINGHOUSE ANNOUNCES NEW SALES COMPETITION

(Concluded from Page 1, Column 1)

by Harland Frazer, nationally known artist. This painting will appear in the Westinghouse refrigerator advertisement in the *Saturday Evening Post* of Oct. 17.

Sales training and the use of Westinghouse selling methods play a paramount part in this contest. Each explorer will be confronted during the contest by the obstacles of Rocks of Depression. No Prospects River, Banker's House Crevasse, Not Interested Precipice, Satisfied with Old Methods Mountains, Faulty Presentation Rapids, Consult Husband Black Forest, Can't Afford Desert, Quitter's Quicksand, and Buy Later Swamp.

To overcome these obstacles, Westinghouse urges its explorers to use Cold Canvass Pass, Telephone Ford Use the User Bridge, Direct Mail Ladder, the Home Survey Pass, Easel Presentation Canal, Night Call-Back Searchlight, Store Demonstration Oasis, Persistent Follow-up and Clinching the Sales Causeway.

Dividend Declared

EAST PITTSBURGH—Dividend of one and one-quarter per cent on shares of common and preferred stock was declared at a recent meeting of the board of directors of Westinghouse Electric & Mfg. Co., A. W. Robertson, chairman, announced.

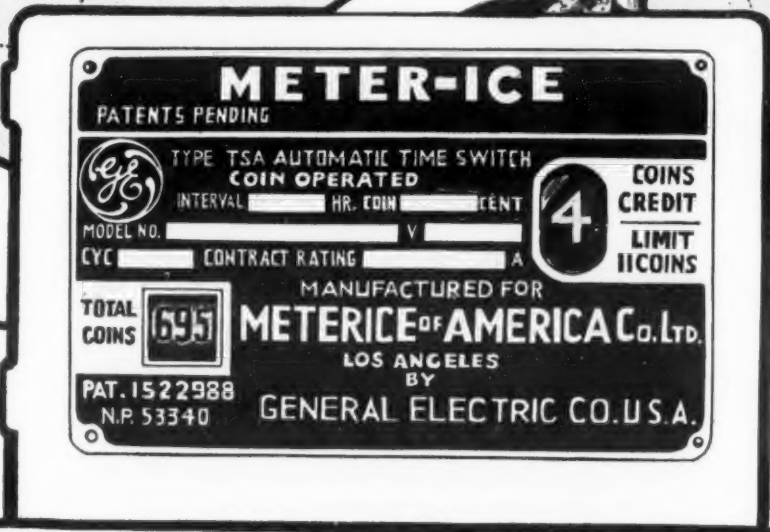
The dividend, amounting to 62 1/2 cents per share, will be paid on Oct. 31 to stockholders of record Sept. 20. Payment of this dividend will make a total of seven and three-quarters per cent paid this year on the par value of both classes and compared with 10 per cent a year ago.

"In view of the reduced earnings of the company this year," Mr. Robertson stated, "it is not thought advisable to pay more than this rate of dividend at this time."

Meter-ice[★] is rapidly spreading across the country

Our plan is selling thousands of electric refrigerators at

**25¢
A DAY**



"Meter-ice" is the first and original Automatic Coin Register and Time Switch on the market. The term "Meter-ice" can be used only in connection with our product. It applies not only to the product but also to the Meter-ice Plan of selling electric refrigerators. The term "Meter-ice" is the property of this Company under trade mark registered in the United States Patent Office under the Trade Mark Act of 1905. Any use of the term "Meter-ice," or deceptively similar term, applied to any other device or plan is a violation of our rights under the trade mark and copyrights acts.



FULL PATENT PROTECTION—"Meter-ice" is the original Coin Register and Automatic Refrigerator Time Switch. "Meter-ice" is manufactured exclusively for us, under contract, by the General Electric Company. It offers full patent protection and is guaranteed by the General Electric Company as well as ourselves. Patent rights will be rigidly enforced.

"METER-ICE" IS RAPIDLY SPREADING ACROSS THE MAP

Strange how rapidly good news spreads! Notwithstanding the fact that we are just at the point of increased production, we have already installed our Plan in leading department stores and very large users of refrigerators in New York, Philadelphia, Baltimore, Washington, Providence, Boston, Pittsburgh, Cleveland, Akron, Detroit, St. Louis, Chicago, Milwaukee, Omaha, Denver, Salt Lake City, Los Angeles, San Francisco and a number of other cities.

ESPECIALLY ADAPTED FOR FALL AND WINTER BUSINESS

"Meter-ice" Plan has been started in several cities where it is now comparatively cold and has shown a similar increase in volume of sales to last year as it has in the past few months during warmer weather. "Meter-ice" will bring your fall and winter sales up to unexpected figures. People will buy refrigerators under the "Meter-ice" Plan all the year round.

OUR ORGANIZATION

Meterice of America Co., Ltd., is an organization of merchandising specialists. The officers are men who have unique merchandising reputations. The field organization is thoroughly trained and competent to carry out the success proven "Meter-ice" plan. In addition to selling you merchandise, "Meter-ice" gives you a proven plan that will increase your Electric Refrigeration sales many fold.

OUR BOARD OF DIRECTORS

Tom May (Vice-President, May Department Stores Company).

President, Meterice of America Co., Ltd.

Ben Platt (President Platt Music Company, Los Angeles).

Hugh R. Smith

Vice-President and Chairman of the Board, Meterice of America Co., Ltd.

Robert B. Rose

Vice-President and General Manager, Meterice of America Co., Ltd.

E. L. Williams

Secretary, Meterice of America Co., Ltd.

PUBLIC UTILITY COMPANIES AND REFRIGERATOR MANUFACTURERS

Experience shows that "Meter-ice" sells about fifteen times the number of electric refrigerators as are sold under the old contract plan. Think of the vastly increased market—think of the necessity for additional electric current—think of the additional constant twenty-four hour load that can be placed on the Power Company's lines. "Meter-ice" sells electric current as well as Electric Refrigeration to an unlimited and "barely scratched" potential market that includes, practically speaking, every family in the country.

Write or Wire for Information

HOME OFFICE

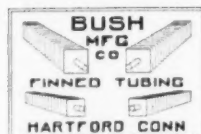
PACIFIC NATIONAL BUILDING
LOS ANGELES, CALIFORNIA
BRANCH OFFICES IN OTHER CITIES



America Company Ltd.

CONDENSERS STANDARD SIZES OR TO YOUR SPECIFICATIONS FINNED TUBING

FOR BOTH HIGH
AND LOW PRESSURE
SYSTEMS



IN COPPER, BRASS,
ALUMINUM OR
STEEL

THE BUSH MFG., CO.
HARTFORD, CONN.

W. H. MARK HANNA, 6-247 General Motors Bldg., DETROIT, MICH.
REFRIGERATION APPLIANCES, CHICAGO - VAN. D. CLOTHIER, LOS ANGELES

Just a Flip of the Finger Brings the Information You Want

• • •

• It's mighty convenient to have back issues of the NEWS available for quick and easy reference. Time and money often can be saved if a permanent file of back copies is handy.

• For the convenience of subscribers, ELECTRIC REFRIGERATION NEWS offers a neat, easily "workable," and good-looking binder. Individual issues of the paper are inserted by means of metal retaining strips—39 with each binder. The paper is secured without "pinching," so that each page lies flat and is easily readable.

• Durable and good quality black imitation leather is used for the stiff covers. "ELECTRIC REFRIGERATION NEWS" is neatly stamped in gold on the top cover and on the back edge of the binders.

• Make it easy to find what you want, when you want it. Buy a binder!

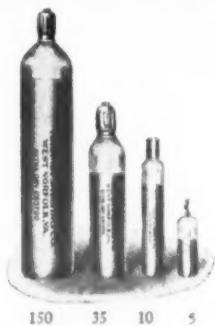
• Shipped postpaid upon receipt of \$3.75.

• • •

Electric Refrigeration News

550 Maccabees Bldg., Detroit

Made by our
exclusive patented
process.



Pure. Easy to
handle. Does not
deteriorate.

The Purest Sulphur Dioxide EXTRA DRY ESOTOO

TRADE MARK REGD U.S. PAT. OFF.

Made expressly for refrigeration use. Guaranteed to contain not over 50 parts of moisture per million

Prompt shipments from our stocks at West Norfolk, New York, Boston, Atlanta and Jacksonville, or from our stocks with agents:

Ice Machine Service Corp., Miami, Fla.
Refrigeration Service & Supplies, Tampa, Fla.
Bartlett Chemicals, Inc., New Orleans, La.
Chemical Utilities Co., Cincinnati, Ohio
G. S. Robins & Co., St. Louis, Mo.
Denver Fire Clay Co., Denver, Colo.
The Braun Corp., Los Angeles, Calif.
Braun, Knecht-Heimann Co., San Francisco, Calif.
Carl F. Miller & Co., Seattle, Wash.

Midwest Chemical Co., Inc., St. Paul, Minn.
Innis, Speiden & Co., Chicago, Ill.
Eaton-Clark Co., Detroit, Mich.
Rolls Chemical Co., Buffalo, N. Y.
Shanahan Chemicals, Ltd., Vancouver, B. C., Canada
Beaver Soap & Chemicals, Ltd., Winnipeg, Man., Canada
Bruce Ross, Ltd., Toronto, Ont., Canada
and Montreal, Que., Canada
Stein Brothers, Ltd., London, England

Write, wire or cable where we may serve you. Cable Address "Eustis Boston"

VIRGINIA SMELTING COMPANY

WEST NORFOLK, VIRGINIA

F. A. EUSTIS, Secretary

131 State St., Boston, and 75 West St., New York

T. K. Quinn Answers Critic of

Has the teacher, whose educational efforts are forced on defenseless children by law, any right to "high hat" the salesman who must please his customer in order to bring modern methods into the home?

(Concluded from Page 1, Column 4)

one who attempts to do anything may be offensive to one who wants *nothing* done, but we cannot all retire to somnolent complacency.

He is perfectly right about the new American attitude toward the front door. There have also been a few changes involving the back door and the whole house, which should not go unnoticed. Society itself is not quite the same, and civilization has actually made some advances.

Failure to Understand

Judging from the human products of the schools over which professors preside, that come to industry for a livelihood, there is a remarkable failure to understand many of the other changes which have taken place in the last century and particularly in the last decade.

I confess to some disappointment over Professor Conrad's mass attack on the house to house salesmen as a class. Perhaps my disappointment comes largely from the blasted high hopes of what I feel we have a right to expect from men who have the opportunity to reflect upon the course of our modern life and who are presumably making a business of education.

It should occur to them that there may be really important questions back of small annoyances. The individual salesman and his methods can hardly be more than a manifestation of underlying economic and social forces for which he is hardly responsible.

There is always a question of what constitutes progress and whether it is worth while to attempt it at a forced rate of speed or at all, but teachers, by the very nature of their chosen profession, are definitely committed to it, and may not consistently back up. They are, or think they are, missionary crusaders in the army of an intelligent God.

Compulsory Education

Professor Conrad may see a great deal of difference between the education which, with the aid of compulsory state laws, he directly or indirectly forces upon our defenseless children, on the one hand, and the education in the use of modern home appliances which the salesman he belittles brings to the door of the home, on the other.

As a missionary, if you please, the professor is paid for his labor, so is the missionary salesman, but the professor's customers are *forced by law* to come to him, while he scorns his fellow progress pusher who, without the benefit of any artificial force, must go to his customers and persuade them.

Porch Climbers or Educators?

I can hear someone say, "Do you mean that these 'Porch Climbers' are an educational force at all comparable with our school teachers?" Many of them are, and I *do* mean exactly that.

Without discounting one iota the great advantages of abstract book education, I should like to make the point, in passing, that a woman, for example, who breaks her back over a wash tub and doesn't know that for a few cents a day, with the aid of a washing machine, she can ease and prolong her life, may receive more real benefit from a salesman of that device than she may from a school teacher. But more of this later.

I have a young son who would gladly give 10 marbles, which he values highly, for an open hand swat at the fellow who teaches teachers to keep him indoors at school, learning to read and write and calculate, when he would much rather be doing something else.

Our school methods, what is taught, how it is taught and to whom and when it is taught are not sacredly established. We are never quite sure that we are right and the child is wrong.

Teachers or Child Baiters?

However bitter or violent the professor may feel toward the salesman who comes to his door as an agent of progress, urging the higher standard of living, he may be sure that my son feels quite as unkindly toward him and all his ilk. The boy would call teachers "Child Baiters" not "Porch Climbers." In this day of specialization we are all likely to be children outside of our own fields.

Professor Conrad is every sentimental about his home and I can understand that. A man's home is still his castle, but the drawbridge, which the professor wants resurrected, has been permanently let down in this modern day.

Business in the Home

To argue that there is or should be no business about the home is the sheerest sort of sophistry. It is one of the busiest places in our world, having to be cleaned and aired and painted and plumbed and heated and stocked, repaired, etc., etc.

The "home fires" must be kept burning. There is coal or oil or gas to get, ashes and dirt to remove, grass to be cut, food and clothing to be bought almost daily. A steady stream of meter readers, plumbers, carpenters and cleaners flows through the house. Then there are the milkman, the ice-man, the grocery man, the postman, the electrician, the garbage man, newsman, etc. They are all business men and the house is veritable bee hive.

If the professor wants a little more seclusion and quiet, he can buy a modern electric refrigerator and so minimize the number of appearances of the milkman and grocery man and say goodbye to the ice man forever.

But unless he is one man in ten, he will not go to the store to buy an electric refrigerator. Some intelligent salesman must call at his home and finally "educate" him.

Between 85 and 90 per cent of all the electrical refrigerator sales are made in this way and there are now close to 3,000,000 of them in use in American homes.

Satisfied Customers

In all my experience in this business, I never heard of a single owner of any electric refrigerator who was not delighted with the purchase, or one who was willing thereafter to get along without this device—and yet—and yet, nine out of ten must be sold by direct house to house solicitation, notwithstanding the existence of thousands of refrigerator stores and all the magazine, newspaper, billboard and radio advertising, and the use of every other conceivable medium for sales promotion.

This alone is a complete justification of the home sales solicitation for electric refrigerator orders, if any justification is needed. A similar statement might be made with respect to many other home appliances.

Aids to Health and Happiness

There are at this moment a number of reasonably priced electrical devices on the market, well within the means of countless families, which would be purchased and add immeasurably to the joy of living and to health and happiness, if the merits of the products were understood.

Take for instance, the air washing, humidifying machines. The air in our heated homes during the winter is, by actual test, dryer than the air on the Sahara desert. Parched throats and quick contrasts with the outer air as we come and go, bring on colds and illness. This is not quackery. It does not follow because some advertising has been used to create imaginary diseases, that all representations are false.

Modern Specialty Salesmanship

When we have a new appliance of merit for use in the home, which will actually be worth many times its cost to the user, shall we wait until he happens to find out something about it, or shall we take it to him?

Five Years or Fifty?

These humidifying machines will be installed in millions of homes within the next five years if we get out and aggressively tell the true story, but it will take *fifty years* if we wait until the American consumer discovers them and is sufficiently well informed to go to a store and actually ask for one.

We talk a good deal in this country about the higher standard of living. Whenever a suggestion arises that perhaps it cannot be maintained in the face of adverse world conditions, we promptly run to the rescue and demolish the suggestion. The President himself has been active in promoting the idea of the higher standard of living and for the most part this refers to living in the home. It is good, American doctrine.

What does a higher standard of living mean from the material viewpoint, if it does not mean the acquisition and enjoyment of these new things? They are being conceived and invented and produced at a prodigious rate. Shall we be passive about it, or enthusiastic?

When we have a new appliance of merit for use in the home, which will actually be worth many times its cost to the user, shall we wait until he happens to find out something about it, or shall we take it to him?

An Exploded Idea

The old notion that we can intelligently buy whatever we need or want or should have, without solicitation, has been exploded. There is no general knowledge of what is wanted or needed, or what is available. It is much too difficult, if not impossible, to keep informed and as new products are placed on the market at a constantly accelerating rate of speed, the difficulty grows.

Maybe our modern life is too swift, too machine-like and too complex, but this is quite another subject. One should not stand by to accept the benefits and advantages of our civilization, and enter only occasionally, to take a crack at a symbol or some single outward evidence of it.

Practically all of our modern electrical home appliances have to be sold from door to door in an aggressive manner. The old fashioned broom, wash tub, ice box, stove, oil lamp, phonograph, hand iron and sink have inertia and ignorance to protect them. They have been and are gradually losing out, and are being replaced by the electric washer, electric refrigerator and range and lamp and radio and iron and dishwasher, etc.

The Wheels of Industry

But it has been a hard battle and is still being carried on by salesmen who are real pioneers. They are doing splendid educational work and are helping to keep factory people employed and the wheels of industry turning, even during these troublesome times.

I happen to know a few thousand of these salesmen and am proud of my association with them. They are workers, with some understanding of their contribution to society and progress, apart from the commissions they earn and spend as good citizens. Many of them are the most sensitive of men.

Because of the feeling that they will not be welcome and because too many thoughtless and discourteous people continually insult them, they often hesitate in their work. If they should ever quit entirely, business in this country would receive a substantial set-back for they are carrying on in the very front rank of the advancing commercial army.

I make no effort to defend the cold-blooded, scheming fellow, selling some clap-trap, which he perniciously forces upon an unwilling housewife at her door step. There are, of course, many of

this sort, selling egg beaters and other products, which may as well be purchased at stores. Articles which have been in use for generations, which have become generally known and for which a regular consumer demand has been established, have much less reason for being carried to the doorstep for sale.

Stupid Generalities

But I submit, that because the practice is being abused, as is every other known privilege and activity under the sun, that is not a good reason for issuing a blanket order against every effort of the kind.

All of the proposed firm answers to be given, regardless and indiscriminately, such as "We do not buy anything at the door" or "This is a home; not a place of business" or "Granted that your product is essential to life, that our need for it is manifest, and that you are the sole agent for it in the world—we still won't buy it. We're funny that way," all of these are stupid generalities, offered in place of the same kind of intelligent discrimination which those who can trust their own mental equipment are required to use every place, every day.

Front Porch Sense

If a man or woman has good sense and judgment there is no better place to show it than on his or her own front porch. An offensive, presuming, unfair or thoughtless fellow should be rebuffed everywhere. He is no more pleasant in an office, a theater, a railroad train or a school than he is in a home.

As for his impositions on the public, those who have the ability can detect them and turn him away anywhere. If they cannot, they are in even more danger in business houses or other places than they are in their homes. Here enters the question of the broader matter of education and the buck may be passed back to the school teachers.

Mentally Retired People

If the proposed printed notice declaring one's absolute unreasonableness and firm negative toward any and all new ideas or sales efforts is to be given out blindly at the door, I respectfully suggest that the same notice be pasted over his eyebrows, or, better still, on the seat of his pants, inviting good swift kicks which may have the effect of rousing mentally retired people into a realization that this is the year Nineteen Thirty One, A. D., that the world is alive, and that civilization is moving on.

There is a competition in progress between the constantly greater number and applications of new inventions, the increasing complexity of our lives today and our ability to understand and use these things and adjust our trade and social relations to them. It is becoming more and more difficult to keep pace with the procession and to know what is right.

A Constructive Force

The good people who strongly resent or favor one thing or another, or who think this or that course is right because of their own mental attitudes and limitations, are constantly leading us off the track on side issues because they have failed to consider the whole problem or the countless reactions of all the other people.

The salesman who calls at our homes to sell improvements and better appliances for use in the home certainly comes to the right place. He is a constructive force in our modern society and is doing his bit to spread the gospel of progress, raise the standard of living and make the world a better place in which to live.



It's a Good Decision To PUSH TEMPRITE SALES THIS FALL

Here is a list of recent TEMPRITE installations. Check up on similar prospects in your field. Your territory is no exception:

- A circulating system in a Michigan College.
- Restaurant coolers in high schools.
- A circulating system in a large Ohio department store.
- A multiple system in a tubercular sanitarium.
- Complete cooling equipment for water and soda water in a fountain installed in New York's largest skyscraper.
- Multiple systems in large office and commercial buildings.
- TEMPRITE beverage coolers now being used by ten soda fountain manufacturers.
- One of the largest root beer manufacturers uses TEMPRITE coolers in their dispensing equipment.
- Large western railway union station TEMPRITE equipped.
- A large Michigan steel mill uses a battery of TEMPRITE industrial water coolers.
- The world's largest cotton towel factory has TEMPRITE cooler installations.
- A soda fountain in one of Ohio's best known department stores has nine TEMPRITE cooling units installed in it.

Profits await your intensive cultivation of water and beverage cooling markets with the TEMPRITE line. Liberal discounts, good territories, adequate sales helps and close cooperation from the factory.

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West Coast Distributors
Refrigeration Products, Ltd., 1110 North Alameda St., Los Angeles, Calif.

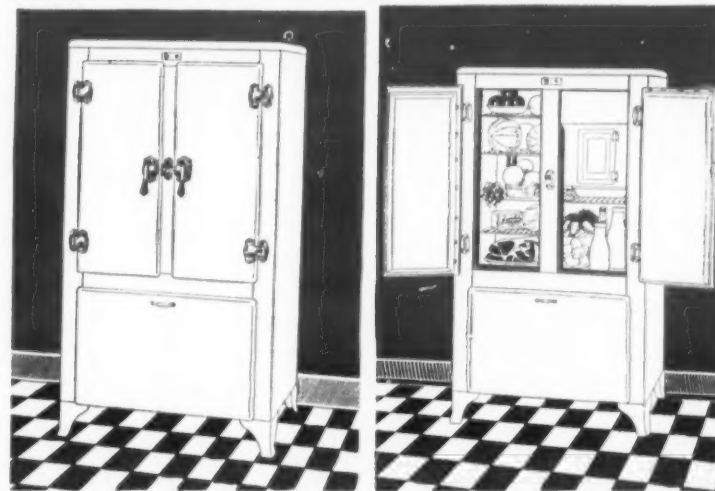
precision built

SHAFTS

Have you thought of buying them on the "outside"? Our booklet "SHAFTS" gives you facts which will help you decide. Write for it on a business letterhead.

MODERN MACHINE WORKS, INC.
156-160 No. Milwaukee St., Dept. D, Milwaukee, Wisconsin

STARR FREEZE Electric Refrigeration



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FASTER SALES BECAUSE THERE IS

3 1/2 year guarantee

NO LOST SALES EFFORT

Our liberal sales plan is making real profits for dealers everywhere. Write us today!

THE STARR COMPANY
RICHMOND INDIANA

ELECTRIC REFRIGERATION NEWS

The Business Newspaper of the Refrigeration Industry
Published Every Week by

BUSINESS NEWS PUBLISHING CO.

550 Maccabees Building, Woodward Ave. and Putnam St.
Detroit, Michigan. Telephones: Columbia 4242-4243-4244

Subscription Rates:

U. S. and Possessions and countries in Pan-American
Postal Union: \$2.00 per year; 3 years for \$5.00

Canada: \$5.00 per year

All Other Countries: \$2.25 per year; two years for \$4.00
Advertising Rates on Request

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VOL. 6, NO. 4, SERIAL NO. 132, SEPTEMBER 30, 1931

Editorial Aims of the News

To encourage the development of the art.

To promote ethical practices in the business.

To foster friendly relations throughout the industry.

To provide a clearing house for new methods and ideas.

To broadcast the technical, commercial and personal news of the field.

Where Do Frozen Foods Stand Today

IT WAS a chastened group which convened at the Georgia Experiment Station last Thursday when President H. P. Stuckey called the Frozen Foods Association of America to order. Chastened, but courageous. And all still defenders of the faith.

Many things had happened since the organization was formed last January in Atlanta. At that time quick-freezing was hailed as a Moses come to lead the South out of the wilderness. Georgia's bounteous peach crop, so much of which had formerly rotted on the ground each year because of a glutted market, and because it was not suitable for canning, could now be saved by quick-freezing the surplus and storing it until out-of-season high prices would prevail. Florida's orange wastage could be salvaged by the same method. Other southern fruits and vegetables could find an expanded market by utilization of the quick-freezing process. The South was intensely enthusiastic.

High Enthusiasm

And last January it looked as if the South, with all its spirit, would lead the nation in the development and marketing of frozen foods. Tom Huston had just closed a successful season of merchandising his quick-frozen peaches. He was planning wider distribution, had added new products, was playing with big ideas. National Dairy Products and Borden, the two largest dairy corporations in the country, were freezing hundreds of thousands of gallons of orange juice in preparation for door-step deliveries with the morning's milk. Southern ice companies were getting ready to freeze shrimp. Prospects were exceedingly bright.

After that, the deluge. By midsummer, the campaign on all fronts—with the exception of a portion of the shrimp sector—had been put to route completely. The 1931 crop of southern frozen foods was a total flop.

Taking the Bumps

Expensive machinery and high overhead made the freezing of orange juice at Tampa by National Dairy and Borden costly. So costly, indeed, that the goods were sold at a loss rather than a profit. Moreover, consumer acceptance did not match expectations. Housewives of the cities in which test campaigns were conducted thought the price was too high, weren't so sure about the quality of the product, and noted disapprovingly that the containers occasionally burst. A mammoth portion of this frozen orange juice never reached the market.

Tom Huston's "Frosty Morning" products ran into all sorts of difficulties. It was found that handling frozen peaches alone was not always profitable to retail outlets. So Tom set about in-

creasing his line. His brood of quick-frozen fruits proved cannibalistic, however, and ate each other up. Inauguration of an addition to the line meant a drop in the sales of its older companions. The hastily constructed Montezuma plant proved inadequate, so operations were moved to Atlanta. Entirely revamped became the sales and distributing organizations. And during the period of chaos, little business was transacted.

The Davison-Paxon store in Atlanta, only quick-frozen meat outlet in the South, had found Birdseye Frosted Foods acceptable to the general public, but complained about the high cost of transporting these products from Boston.

Moreover, continued investigations at the Georgia Experiment Station (where the whole movement started) were leading the scientists there to some radical conclusions. The able T. G. Woodroof even told the gathering last Thursday that it was possible they had been on the wrong track, that better results might be obtained if fruits and vegetables were stored at temperatures barely above their respective freezing points than if they were subjected to the shock and strain of freezing.

Faith, Hope, Courage

There were the facts. The Southern frozen fruit industry had rammed into some big boulders on a rocky path. Members of the association, which is still largely Southern in character and representation, all seemed to agree that the possibilities of quick-frozen meats were least of all the frozen products.

In spite of the dark outlook, in spite of the fact that many of those present had had their fingers burned, the spirit which pervaded the session was one of hope and courage. These men were eager to take another swing at the ball. They had profited by their mistakes, were adopting new grips and new stances, and were all set to crack out home runs in 1932.

W. R. Tucker, the man who persuaded Tom Huston to enter the business, had demonstrated his faith in the economic worth of quick-frozen fruits by leaving his comfortable railroad job to promote a new quick-freezing organization, Ice-bound Products, Inc.

The somewhat bitter pills swallowed by the Southern quick-freezing industry this year fortunately were not prescribed by Fate for the East and Middle West.

Successful Campaigns

Swift & Co. has enjoyed reasonable success in its "peaceful penetration" of Michigan with quick-frozen meats and poultry, and has had considerable luck with "Identifiable" meats in Chicago suburbs, particularly Chicago Heights.

Armour & Co., after looking over the "Z" system and turning it down, has recently begun shipping quick-frozen meats in quantities to institutions. Around Indianapolis, Sally Lee Frigid Meats, packed by the Indianapolis Abattoir Co., have been progressing steadily.

Most significant of all is the New England campaign on Birdseye Frosted Foods, conducted by General Foods Corp. Last year these quick-frozen foods were sold only in Springfield, Mass. Now they are being sold throughout New England, in New York and New Jersey. Retail outlets are well beyond the century mark, and continuing to increase.

The success of this carefully staged, conservatively managed, profit-seeking campaign should be convincing.

Paying Its Way

Birdseye executives first made sure that the product was right. Then they proved it could be sold. Followed several months of testing of equipment, some of which was finally designed to meet their approval. Then they chose their new retail outlets carefully, kept the entire operation well under control, and advertised intensively. Sound business methods have, as might be expected, brought satisfactory results.

Frozen foods may be one of the new industries which will lead us out of the financial doldrums. Its first steps may be faltering; it may receive several cracks on the nose. But if carefully guided according to principles of good business judgment, it should become an industrial pace-setter and—what's more—pay its way as it goes along.

An Editor on Wheels

Stories of Interesting PLACES in the Refrigeration Industry

By GEORGE F. TAUBENECK

Atlanta, Ga.

Atlanta is an air-conditioned city. Higher than any American city of equal or more than its size—1,050 ft. above sea level—it has a mild, tonic climate.

Neither high humidity content of the atmosphere, nor extreme changes in temperature, bother the residents of this city.

Deaths by heat, sunstroke, chills, or any other form of shock caused by weather, are as rare in Atlanta as a blonde negro (that simile wouldn't be so good in Harlem). The air is clean, fresh, pure, and well circulated by nature.

Atlanta's climate may furnish one reason for its growth and development as the industrial, commercial, and financial capitol of the New South.

Another reason is the stream of well-directed municipal advertising which has poured out from the vicinity of the Georgia state house and Five Points (business center of the city).

Still more plausible as an explanation of Atlanta's rise is the fact that it is ideally situated as a distribution point.

It was given its first big impetus by the railroads, which found it a natural juncture.

Following the railroads came branch offices, warehouses, and other evidences that commerce believed Atlanta to be the city best fitted for a southern activities operation center.

John C. Calhoun, who ranks with Henry Clay, Daniel Webster, Patrick Henry, Edward Everett, and William Jennings Bryan as one of America's greatest orators, made a speech at Memphis, Tenn., back in 1845, that stirred his audience to a high pitch of excitement.

As is the way with oratory, it was not what Calhoun said, but how he said it, that caused the wild burst of applause.

Nevertheless, Calhoun usually had something to say, and in this speech he made a profound prophecy of Atlanta's future strength. Said Calhoun:

"Such is the formation of the country between the Mississippi Valley and the southern Atlantic coast, from the course of the Tennessee, Cumberland, and Alabama rivers, and the termination of the various chains of the Allegheny Mountains, that all the railroads which have been projected or commenced, although each has looked only to its local interest, must necessarily unite at a point in DeKalb County in the state of Georgia . . . so as to contribute one entire system of roads, having a mutual interest each in the other, instead of isolated rival roads."

The railroads came, bringing with them their train of commercial activity, in less time than even Calhoun might have predicted. Atlanta today has 15 lines of eight roads in its service.

Peachtree street, Atlanta's main artery, was once an old Indian trail, a trail which ran along the divide between the Gulf of Mexico and the Atlantic ocean.

On the present site of Atlanta once stood an Indian settlement which bore the name, "Standing Peachtree." That explains why a street totally devoid of peach trees can be named Peachtree street.

Near this old Indian village a pioneer by the somewhat appropriate name of Hardy Ivy built a log cabin in 1833.

Three years later the Georgia legislature authorized the building of a state road along the old Indian trail.

Hardy's cabin was the terminus of this road.

On Christmas eve, 1842, the little settlement which had grown up around Hardy's cabin, saw its first train (locomotive and one box car). This was the end of the line.

The dwellers in Hardy's settlement saw themselves in a new role, an incorporated as a town, and renamed Mar-terminus. It was.

(Some say, however, that the spot was first called Terminus in 1837 by Stephen Long, civil engineer for the Western and Atlantic railroad. Take your choice.)

Two years later Terminus was incorporated as a town, and renamed Marthasville in honor of a comely daughter of Governor Wilson Lumpkin.

Again in 1848 the town which had grown from Hardy's settlement changed its name, this time to Atlanta—at the suggestion of Edward Thompson. The name was a natural.

Within 30 years Atlanta had acquired status as a city. It had 10,000 inhabitants.

And then came Sherman.

The Union general took the city, ordered the denizens to scatter, razed the city by fire, tore up the steel rails, destroyed its tributary crops, and left the city a junk heap of ruins and smoldering embers—all within a space of two weeks, the first fortnight in September, 1864.

Such was the industry and faith and courage of the ousted inhabitants of a ruined city that five years later Atlanta was not only entirely rebuilt, but had grown to be a city of 22,000.

Sherman could destroy the physical features of a city. He could not destroy its spirit. What's more, he couldn't mutilate Atlanta's strategic natural position. It again became a focal point for distribution to the South.

In the language of Henry Grady, great Atlanta newspaperman and guiding light of the reconstruction era, Atlanta's citizens took "the ashes left by Sherman's army and raised therefrom a brave and beautiful city. They somehow have caught the sunshine in the bricks and mortar of their homes and have builded therein not one ignoble prejudice or memory."

Today Atlanta has a population of more than a quarter of a million. It is still building, still expanding, still growing. And its appearance reflects the constant state of flux in which it finds itself.

According to one of the editors of the Atlanta Georgian, Atlanta uses more skyscraper office space per capita (white), than any city in the world.

The national average of skyscraper office space used per capita is about 4 sq. ft. In Atlanta the average is 19.5 sq. ft.

Skyscrapers, this publicist feels, comprise one of Atlanta's major industries.

Undoubtedly the town is being rebuilt just as surely as it was after the Sherman debacle. Fine old southern mansions repose in vines and mold, sandwiched in between modern garages, warehouses, office buildings. Skyscrapers shoot out of the earth like Jack's beanstalk, and often at unexpected places. The spirit of progress pervades.

All of this rebuilding activity lends a charm to Atlanta which might almost be termed the charm of quaintness, notwithstanding the fact that we usually reserve "quaint" for Dutch villages and hoary old cities like New Orleans and Quebec.

There is the atmosphere of the Old South, exemplified by the pillared mansions, the gardens, the high-banked lawns, and the heavy shade trees.

And growing up in the midst of all this is a city of the New South, a city of steel and angles and clean lines and height.

Together, these coexistent but widely divergent styles of architecture comprise an effect which cannot be duplicated anywhere.

That charm which is the Old South is present in the manners of the people, in their musically drawled speech, in their desire to entertain you and make you stay longer than you should.

The last words I heard in Atlanta, uttered by the man who sold me a magazine in the terminal railroad station, were: "Come back soon!"

And if you want to get a big dose of the old-time Southern hospitality, go to the Atlanta Biltmore. It is a beautiful hotel (this is not a paid advertisement—they soaked me plenty for staying there), and the service is better and friendlier than you could possibly expect.

Dinner is served on a tile-paved patio, underneath the moon and the stars, by obsequious darky waiters. Any minute you expect to hear one of them ask, "Nother mint julep, kunnell?"

On one side are stately pillars, the tall Corinthian columns without which any southern edifice would feel undressed. On the other side is a well-cultivated garden.

And the food is irreproachable.
(Concluded on Page 13, Column 1)

IDEAS AND IMPRESSIONS • COMMENT • VIEWS AND EXPERIENCES

By F. M. COCKRELL

Fighting Irishman

The article in this issue by T. K. Quinn, vice president of the General Electric Co., is the answer of a fighting Irishman, a natural-born leader of men and a highly-successful business man to the tirade of a college professor against salesmen.

Like most highly-successful business men, Mr. Quinn does not often express himself in print. In the presence of other business men, other leaders, other fighters, he speaks freely and his words command respect.

Standing before several hundred such men he can arouse cheers—or tears.

Something in the protest and proposals of Prof. Lawrence H. Conrad stirred Mr. Quinn to take his pen in hand—or call a stenographer.

Perhaps it was the faulty reasoning, or the lack of discrimination, of a man who bears the title of "college professor."

Possibly the fact that the provoking utterances appeared in a magazine called "The Forum," demanded an answer.

More likely, it was a mental picture of an earnest young salesman going forth hopefully to present a message of health protection, labor-saving, and happiness in the home, together with another picture of this same young man discourteously rebuffed by a professional educator.

Such pictures might easily cause T. K. Quinn to write such an article.

Clear Thinking

In these befuddled times, when magazines and newspapers are filled with all sorts of half-baked ideas, it is refreshing and inspiring to have a glimpse of the vision of a clear-thinking business executive. Mr. Quinn has performed a real service in stating the case of household appliance salesmen—the pioneers of better living standards.

Mr. Quinn points out that there are "offensive people everywhere, but none of them are good salesmen." He says: "an offensive, presuming, unfair or thoughtless fellow should be rebuffed everywhere."

It is evident that Mr. Quinn's sense of fairness is outraged by the professor's lack of discrimination between grafters who impose on the public and salesmen with a real service to offer.

He suggests that those who have good sense and judgment can easily detect the impostor and turn him away anywhere.

Some people, whose code requires them to be polite to all, regardless of circumstances, devise ingenious methods of checking the advances of high-pressure visitors.

Sucker List

I recall the story of a meek mannered professional man who has made some injudicious investments.

Apparently his name was on the "sucker list" of numerous blue sky promoters.

Having granted interviews to many stock salesmen, he observed that they all had the same approach.

The salesman would draw his chair close, tap the doctor on the knee and whisper confidentially:

"Do you want to make some money?"

In earlier contacts with these solicitous gentlemen he had given the expected answer.

Having acquired wisdom from his experience, he hit upon a counter attack which always had the desired result.

Instead of taking a defensive attitude, he leaned forward and met the steady gaze of his visitor.

Root of All Evil

Even more confidentially, with even greater solicitation for the welfare of his caller, he propounded a question of his own:

"Young man, do you know what the Bible says about money?"

If the startled promoter had no quick answer, he leaned still closer and hoarsely whispered:

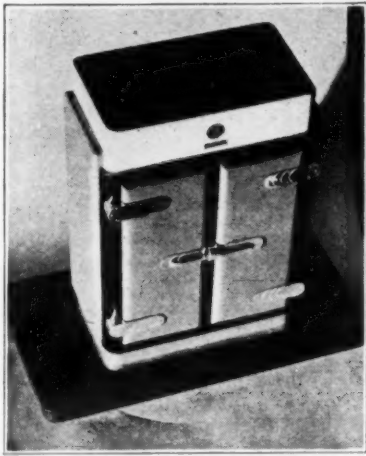
"Young man, do you read your Bible?"

By that time, the visitor was usually on his way to the door.

Beauty Dividends

In the "Advertising Arts" section of *Advertising and Selling* (September), Earnest Elmo Calkins explains "the dividends of beauty."

Modernistic Design



Refrigerator design by Joseph Sinel, reproduced from illustration in *Advertising Arts* section of *Advertising and Selling*.

Among the examples of art in industry, which illustrate his views, is a model of a mechanical refrigerator designed by Joseph Sinel.

The illustration is reproduced, much smaller in size, on this page. It makes an attractive picture, but I cannot see much to commend it as a mechanical refrigerator.

The artist probably gathered his ideas of refrigerators in a condensed New York apartment.

Bended Knees

I never could understand the idea of putting food so close to the floor, or requiring the housewife to go down on bended knees to get at the contents of a refrigerator.

Just where the mechanism of this "mechanical refrigerator" is to be concealed is not apparent, but of course that is a mere detail to an artist.

Also, I am puzzled by the design of the hinges. They seem to violate the most obvious mechanical requirements of a hinge.

I have no quarrel with those who would add beauty to utility.

Unfortunately, few artists can comprehend mechanical principles, just as few mechanics have any sense of artistic values.

Chicago Post Office

The story is told that the Chicago post office, supposedly an architectural masterpiece, was practically completed before it was discovered that the architect had failed to make provision for getting the mail in and out of the building.

I have seen homes, handsomely furnished and beautifully decorated, but lacking almost everything to make them comfortable and livable.

Mr. Calkins says: "For our new houses we will need furniture, modern, appropriate and perfectly adapted to its use." The italics are mine.

He continues: "I do not mean putting a modern valet inside an antique lobby nor a telechron works inside a banjo clock, both of which have been done. We must scrap out antiques."

Graceful Airplanes

On a train, during the war, I fell into conversation with Martin, pioneer airplane builder.

He related the disastrous results which came from the attempt to redesign the French spud for American quantity production methods. To explain a point, he made the statement:

"If an airplane is not graceful in appearance, it will not fly gracefully."

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Michigan City, Indiana

Are in the Market
to Manufacture Standard &
Special Refrigerators, and
Other Sheet Metal and Por-
celain Enameled Products.

Efficient, well-designed tools are always pleasing to the eye of a skilled mechanic.

Even laymen are fascinated by the performance of a well-oiled, smooth-working machine.

A device that is unnecessarily noisy, awkward to handle, hazardous to the operator, or which performs its function imperfectly is usually unsightly.

When the errors are corrected by redesign, there is a noticeable improvement in appearance.

Refrigeration History

Some of these days when this industry has settled down enough to permit a reasonably accurate evaluation of the various factors contributing to its development, we are going to publish an interesting history of electric refrigeration.

The story of the past five years is a matter of record. We also have considerable data regarding the previous five-year period, and some of the facts concerning developments prior to 1920.

Readers are invited to furnish information, particularly regarding the activities of pioneers, which will help complete and illuminate the records.

Old photographs of inventors and pictures of early models of automatic machines will be welcome.

Old correspondence and printed matter will be helpful to the historian in getting sources of additional information for his volume.

All contributions will be carefully preserved in a special file.

The Freezerator

T. C. Whitehead, a recent visitor to the News office, contributed several threads which will be woven into the history of electric refrigeration.

He was one of the stockholders in the old Freezerator Co., which was just getting under way when the slump of 1920 came.

The business was then sold to Alexander Malcolmson who was one of Henry Ford's original backers.

Malcolmson bought the Freezerator business for his son to operate, but a few months later sold it to Cleveland Fuel and Ice Co.

The Cleveland organization will be remembered as one of the first ice companies to adopt the idea that ice and mechanical refrigeration represented two ways of serving the public and that each type of service might be sold by the same people.

Fred Heideman

The Freezerator machine was developed by Fred Heideman in the tool shop of the Cadillac Motor Co.

Fred Heideman was mentioned in a recent issue in the report of an interview with H. V. Higley of the Ansul Chemical Co. Mr. Higley credits him with the development of the first successful Isko compressor.

Mr. Heideman had spent some time with Kelvinator before he became connected with the Freezerator promotion.

DuBois ("Pink") Young, now president of the Hupmobile Co., was one of the heavy stockholders in Freezerator.

The Freezerator was a three-cylinder machine with a worm drive (no belt). It had an expansion valve and brine tank.

Mr. Whitehead says that it was neat looking, compared with others on the

market at that time which used a flat belt and idler pulley.

In 1921 Mr. Whitehead made a serious study of all the various types of refrigerating machines and gradually arrived at his own conclusions regarding the most satisfactory methods of accomplishing refrigeration.

Between compressor and absorption systems he favored the compression. The choice between reciprocating and rotary compressors was made by selecting the reciprocating.

Next came the matter of belt or gear drive. Based upon automobile engineering experience he decided that a compressor could be driven direct at motor speed (1,750 r.p.m.)

His basic design required a good deal of development and not until 1931 (10 years after the start), did he feel satisfied that the unit was right.

Until recently Mr. Whitehead was president of the Whitehead & Kales Co. He now plans to devote all of his time to electric refrigeration.

Bound Volumes

In order to meet the demand for bound volumes of *ELECTRIC REFRIGERATION NEWS*, 50 copies of each issue have been laid away during the past year for this express purpose.

Volume V includes the issues from September, 1930, to August, 1931.

We are now having these copies bound in "half leather and cloth," with gold stamping of the name on the front cover and backbone.

Readers who want a permanent, convenient and attractive file of back issues may obtain one of these bound volumes by sending check for \$10.00.

We also have a few extra sets of volumes I, II, III and IV which are offered at the same price (\$10.00 per book) so long as the supply lasts.

Across the Street

C. I. T. Refrigerator Financing Service is offered through our Local Office near you. When you want a rush check-up on a prospective purchaser our credit man on the spot will immediately investigate and report, at no expense to you. As sales are made you send along the contracts and our Local Office promptly gives you cash. Likewise collections are tactfully handled by a trained force of local C. I. T. men, who know conditions in your territory.

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Latest News for the Refrigeration Engineers

Air Conditioning Industry Promises Tonic for Business Depression

By Gordon C. Corbaley,
Director, American Institute of Food Distribution, Inc.

IT IS becoming manifest that American business will return to reasonable activity because of the shortage of consumer goods now helping the shoe and textile industries, and that maintaining this relatively favorable condition will depend upon the degree to which each industry is able to protect its operations from destructive overproduction, and to increase its outlet by maintaining the favorable prices and the efficient distribution that will secure maximum consumption.

But any major expansion in American business depends upon our finding new wants which will be so attractive to the American people as to call for a large increase in production. The inadequate living conditions of a great percentage of our population, and the ingenuity of our business planners are indicating the way to a great number of such wants. The problem is to speed this process, and give the greater impetus to production and consumption essential to a full tide of prosperity.

An abundance of these wants can be envisioned—television, air flying machines, new highways that will enable us to really get value out of automobiles, comfortable housing for millions of American families who now live in squalor, household conveniences of many kinds—these and scores of other things offer immense opportunity for the expanding of production.

The food trades are interested in each of these possible expansions because of the impetus they will give to the employment of the men and women who use food. We have the one staple every-

one must have and each measure of added prosperity means better business for us.

Our problem is to participate in these expansions, and to adjust our methods to fit changes in living habits. To whatever extent the American people are more discriminating in their living, we must provide more tasty food.

But there is one section of this impending expansion of immediate interest to us because of the degree to which it promises to alter the flow of food distribution. That is the general use of controlled temperatures in the lower scales of the thermometer.

The present successful campaign of the electric refrigerators for greater business, the talk about sharp freezing of foods, and the several ventures into the merchandising of appliances for cooling the places where people live and work, are straws showing the direction in which the commercial wind is preparing to blow.

It is strange that we have not thought of this before. We have learned to close our bodies up tight against a little chill in the atmosphere, but we have done little to protect our comfort and efficiency from the serious effects of excessive high temperature. The answer is probably because men have known since tribal days of the comfort to be gained from a fire and naturally we have elaborated and controlled that comfort.

But the number of deaths and the losses in human efficiency from heat are far greater than those from excessive cold. All but a small percentage of the American people live under climatic conditions where there is a portion of the year when much of their comfort is seriously upset, and their efficiency is greatly lowered because of the enervating influence of high temperatures and humidity.

We realize this when we try to continue working through the summer months. We struggle through, but our rate of output is seriously slowed, and we wear ourselves down until weeks of fall weather are necessary to bring us back to where we are normal producers.

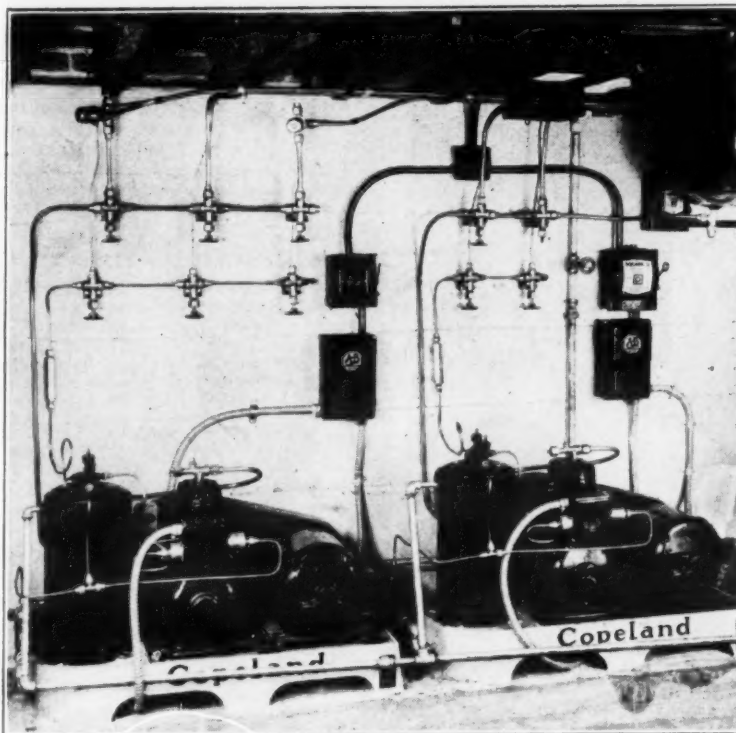
This influence supplies the reason why most of the worth while achievements in human history have been by men living at a certain latitude.

These major influences on human life and efficiency are recited to emphasize the importance of temperature. However, another influence supplies the reason for the change now coming. We are awakening to the controlling of temperature because an increasing number of men are realizing that this offers opportunity for profitable employment. A few theaters and other public interiors are being cooled to attract patronage. In these cases the major interest is to demonstrate a chilly atmosphere rather than to make the patrons actually comfortable.

But out of these efforts an expansion of the idea is shaping. Both ice companies and manufacturers of mechanical refrigerators are developing an export service on the control of interior temperatures. The time is not far distant when our homes, apartments, stores, factories, public meeting places and trains will have the temperature and purity of their air controlled in a common-sense way.

We will probably employ the same system to supply a continual circulation of warmed air, so as to have through the year a reasonably constant temperature of air fit to breathe.

Neat Installation



Two Copeland 1 hp. X-1200 condensing units provide refrigeration for Fleming's newly equipped restaurant in Mt. Clemens, Mich.

PENN OIL BURNER CONTROL OPERATES BY HEAT STACK

DES MOINES, Iowa—Penn Electric Switch Co., here, has just devised a new type of oil burner control which operates by the temperature of the heating stack. It is designed to control automatically power-driven burners using intermittent ignition of the electric spark or expanding gas flame type, combination gas and electric ignition, or continuous ignition systems.

It consists of a bi-metallic helix which protrudes into the stack, and is fastened to a molded Bakelite case housing the main line contacts, starting switch contacts, a bi-metallic metal cutout strip, a heating resistor, and a timing adjustment.

In normal operation the stack helix is in the cold position when the room thermostat closes, calling for heat. This energizes a pilot circuit which starts the motor and completes the ignition circuit. When combustion warms the stack, the ignition circuit is opened, but the motor continues to run until the circuit is opened by the room thermostat or limit switch, Penn Electric engineers explain.

Safety features provide for shut-down in case of failure of flame, power, or ignition.

BUSINESS MEN TO TOUR RESEARCH LABORATORIES

NEW YORK CITY—A party of 100 business men and bankers will start from here on Oct. 5 for a 10-day tour of research laboratories, arranged by the National Research Council.

Thirteen research organizations will be visited, both small and large, where scientific research is being used to solve some of the major problems facing the various industries. The trip will be made from New York to Boston by boat, a special train conducting the travellers during the remainder of the journey. The itinerary follows:

Oct. 6, laboratories of the Massachusetts Institute of Technology; Arthur D. Little, Inc.; Dewey & Almy Chemical Co.; United Drug Co., and the Thompson & Lichtner Co., situated in Boston and Cambridge. Oct. 7, Eastman Kodak Co., Rochester, N. Y.; Oct. 8, Ford Motor Co., Detroit; Oct. 9, Nela Park, Cleveland; Oct. 10, Goodyear Tire & Rubber Co. and the Goodyear-Zeppelin plant, both situated at Akron, Ohio; Oct. 12, Tanners' Council of America and the Basic Science Research Laboratory, the latter identified with the General Foods Corp., both at the University of Cincinnati; Oct. 13, Battelle Memorial Institute, Columbus, Ohio; and Oct. 14, the Westinghouse Electric & Mfg. Co., East Pittsburgh.

Coming Events

National Electric Light Association, Great Lakes division, Oct. 1-3, French Lick, Ind. Tom C. Polk, 20 N. Wacker Drive, Chicago.

Association of Electragists, International, convention, Oct. 5-8, Hot Springs, Ark., L. W. Davis, 420 Lexington Ave., New York City.

American Gas Association, annual meeting, Oct. 12-15, Atlantic City, Kerwin R. Boyes, 426 Lexington Ave., New York City.

National Safety Council, annual congress, Oct. 12-16, Chicago, W. H. Cameron, 20 N. Wacker Drive, Chicago.

Institute of American Meat Packers, annual convention, Oct. 16-21, Waldorf-Astoria hotel, New York City.

American Hardware Manufacturers' Association, convention, Oct. 19-22, Chicago, C. F. Rockwell, 342 Madison Ave., New York.

American Society for Municipal Engineers, annual meeting, Oct. 19-23, Pittsburgh, C. W. S. Sammelman, 4359 Ludell Blvd., St. Louis.

National Association of Railroad Utilities Commissioners, meeting, Oct. 20-23, Richmond, Va., James B. Walker, 270 Madison Ave., New York City.

International Association of Municipal Electricians, annual meeting, Oct. 26-30, Jacksonville, Fla., W. H. Harth, City Hall, Columbia, S. C.

Dairy Industries Exposition, Oct. 26-31, Atlantic City, N. J., Roberts Everett, 225 W. 34th St., New York City.

National Association of Practical Refrigerating Engineers, convention and educational exhibition, Nov. 10-13, Rice hotel, Houston, Tex., Edward H. Fox, 435 N. Waller, Chicago.

American Society of Electrical Engineers, winter convention, Jan. 25-29, New York City, F. L. Hutchison, 33 W. 39th St., New York.

GENERAL ELECTRIC MARKS CODE WIRE BY COLORS

SCHENECTADY, N. Y.—A method of identifying its various grades of code wire by means of colored rubber insulation has been adopted by the General Electric Co.

By means of this marking, the grades of wire in an installation may be identified at any time for years after the wiring system is in use, G. E. engineers claim.

The three grades will be marked with colored rubber insulation as follows: Code—black; Intermediate—red; 30%—green.

APARTMENT BUYS MAJESTIC

SOUTH NORWALK, Conn.—(UTPS)—Nineteen Majestic electric refrigerators are to be installed in the Hoyt apartment house by the Norwalk Electrical Co.

BRISTOL CO. OFFERS 'FREE VANE' CONTROL

WATERBURY, Conn.—The Bristol Co. is offering a new line of air-operated recording controllers, employing a "free vane" as the initiator of control.

The "free vane" is attached to, and actuated by, a measuring element of a temperature or pressure recording system and moves between two air jets with stream lines coinciding placed opposite each other. In passing into these air streams, the vane varies the amount of air which escapes from the jets, thus effecting control.

Vane Floats between Air Streams

The arrangement and design of the two jets and the "free vane" are such that vane floats between two equal air streams at right angles to its motion, hence the position and movement of the measuring elements are not affected. The recording device is, therefore, free to reproduce the temperature or pressure with complete accuracy.

Control from a frictionless device as described above permits the use of sensitive measuring systems which the company furnishes.

The component parts are accessible, although compactly assembled. The point of control can be set to a visible scale point by means of a key.

Diagram Explained

Fig. 1 shows the operation of the controller as follows: Air at 15 lbs. pressure is admitted through connection (7) and carried through filter (8), one branch leading to an indicating gauge (9). The other branch turns to the left and supplies air to the control system.

This supply branch in turn divides into two branches, one passes through an orifice (10) supplying the elastic element (11), and then through a connecting line to the opposing jets (5) and (6).

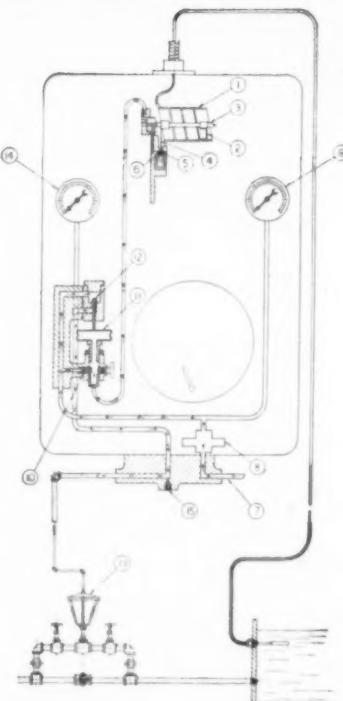
The other branch supplies air to the pilot valve (12) and through the pilot valve to the indicating gauge (14) and outward to the top of the diaphragm motor valve (13).

The air which enters through orifice (10) is dissipated through jets (5) and (6). The amount which may be dissipated through these jets depends upon the position of the "free vane" (4). This vane, being directly attached to an elastic element (1) of the hollow helical type, is moved by changes in the temperature at the sensitive bulb shown in the bath at the lower right hand corner.

Operation of Jets

The changing amount of dissipated air at jets (5) and (6) produces a pressure change on the elastic element (11) and a consequent deformation which operates pilot valve (12) admitting more or less

New Bristol Control



Operation of Bristol's new controllers is explained by the above diagram.

air to the top for operating the diaphragm motor valve (13). The elastic element (1) also carries the recording penarm which is attached to the shaft (3).

The case is available for wall or flush mounting. It is furnished as a single or two-pen instrument, in combination of pressure or temperature and has a pressure range up to 1,500 lbs. per sq. in. and temperature range up to 1,000° F., using 12-in. charts. Temperature measuring systems may be either vapor or gas filled, depending on the operating temperatures encountered. Patents covering this method of control are applied for and pending.

PROFESSIONAL SERVICE

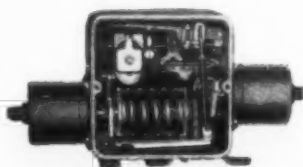
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U. S. Appellate Court Holds Bohn Door Patents Invalid in Suit against Seeger

(EDITOR'S NOTE—The following decision was handed down in United States Court of Appeals in the suits of Seeger Refrigerator Co. and Bohn Refrigerator Co.)

UNITED STATES CIRCUIT COURT OF APPEALS EIGHTH CIRCUIT

No. 9106—Seeger Refrigerator Co., Appellant, vs. Bohn Refrigerator Co. et al., Appellees. Appeal from the District Court of the United States for the District of Minnesota.

No. 9107—Bohn Refrigerator Co., Appellant, vs. Seeger Refrigerator Co., Appellee. Appeal from the District Court of the United States for the District of Minnesota.

Frank Parker Davis (Mr. Harry S. Johnson was with him on the brief) for Bohn Refrigerator Co. et al.

Frank A. Whiteley (Mr. Howard L. Fischer was with him on the brief) for Seeger Refrigerator Co.

Before KENYON and BOOTH, Circuit Judges, and DEWEY, District Judge. BOOTH, Circuit Judge, delivered the opinion of the Court.

Involves Three Patents

This is a patent suit involving three patents. Bohn Refrigerator Co. as plaintiff sued Seeger Refrigerator Co. for infringement of two patents owned by plaintiff. They are No. 1,263,843, issued April 23, 1918, to Gebhard C. Bohn for a refrigerator door, sometimes called the "A" patent; and No. 1,329,453, issued Feb. 3, 1920, to the same party for a refrigerator-closure, sometimes called the "B" patent.

Defendant Seeger Refrigerator Co. in its answer set up a counterclaim alleging the plaintiff was infringing a patent owned by defendant, to-wit, No. 1,209,544, issued Dec. 19, 1916, to Thomas P. Bolger for refrigerator construction.

Claim 3 of the "A" patent; claim 5 of the "B" patent; and claims 1 and 2 of the Bolger patent are the only ones in suit.

Dismissed in Trial Court

The trial court by its decree dismissed plaintiff's bill for want of equity; held claims 1 and 2 of the Bolger patent valid but not infringed by plaintiff's construction; and dismissed the counterclaim for want of equity. These appeals followed.

From a memorandum opinion of the trial court, it is gathered that the court was of the opinion that the claims in suit of the Bohn patent were invalid for lack of invention and were not infringed by defendant.

Bolger Patent No. 1,209,544

We take up first the Bolger patent, that being the oldest of the three. The objects of the invention are thus stated in the specifications:

"The present invention relates to certain new and useful improvements in the construction of sheet metal refrigerators, and has for its object to provide a novel means for fastening the edges of metal lining and outside metal covering in the door opening whereby a tight joint is obtained when the door is closed and a continuous metal wall for conducting heat from the outside to the inside of the refrigerator is avoided.

"Further objects of the invention are to provide a construction of this character which is simple and inexpensive, which breaks up any possible air passage around the edge of the door, which securely fastens the edges of the sheet metal lining and cover without bringing them together in such a manner as to provide a continuous metal wall between the outside and the inside of the refrigerator, and which does not interfere in any manner with the opening and closing of the door."

Claims of Bolger Patent

Claim 1 of the Bolger patent reads as follows:

"1. A refrigerator including a body having a door opening, a swinging door hinged to the body and adapted to close the door opening, a sheet metal lining applied to the body and having the edges thereof carried into the door opening, a sheet metal outer covering applied to the body and also having the edges thereof carried into the door opening, strips of non-heat conducting molding applied to the sides of the door opening and fitting over the edges of the sheet metal lining and the sheet metal outer covering said edges being held in a spaced relation to each other so that there is no continuous metal wall between the outside and the inside of the refrigerator, and corresponding strips applied to the door for engagement with the strips of the door opening to form a tight joint when the door is closed."

It is apparent that the following elements are included:

1. A refrigerator including a body having a door opening.
2. A swinging door hinged to the body and adapted to close the door opening.
3. A sheet metal lining applied to the body and having the edges thereof carried into the door opening.
4. A sheet metal outer covering applied to the body and also having the edges thereof carried into the door opening.
5. Strips of non-heat conducting molding applied to the sides of the door opening and fitting over the edges of the sheet metal lining and sheet metal outer covering, said edges being held in a spaced relation to each other so that there is no continuous metal wall between the outside and the inside of the refrigerator.
6. Corresponding strips applied to the

door for engagement with the strips of the door opening to form a tight joint when the door is closed.

Claim 2 is similar to claim 1, but includes a sheet metal covering applied to the door as well as to the body.

The evidence shows that prior to the Bolger invention there had been all-metal refrigerators in use, but they had certain well-recognized defects; first, there was no space between the inner metal and the outer metal at the door openings. As a consequence, the cold from within the refrigerator passed out through the metal and caused sweating and other complications. Further, the metal plates were held in position by nails and screws which also conducted the cold out and permitted sweating. The plates became loose in time. Third, there was no cushioning seal in the door opening between the contacting portions of the door and the body.

Bolger Remedied Defects

Bolger remedied these defects. The outer sheathing and the inner lining of the refrigerator in his invention were carried unbroken into the door opening and around the edges of the door, and were held in position by means which acted as insulators and as sealing and cushioning devices. Similar improvement was made in respect to the covering of the door. Bolger's invention was made use of by later manufacturers of refrigerators and was a distinct advance in the refrigerator art. We think claims 1 and 2 of the Bolger patent were rightly held valid.

The structure manufactured by the Bohn Refrigerator Co., and which is accused as infringing the Bolger patent, differs in several respects from the structure disclosed by the Bolger patent. First, the Bolger patent discloses a flush door for its refrigerator, whereas the Bohn construction provides an overlapping door.

Furthermore, and this in our opinion is vital, Bolger has a tight joint between the strips along the edges of the door opening and corresponding strips along the edges of the door. This requirement of a tight joint is found in both claims of Bolger here in suit, and it may be remarked that it is also found in several of the other claims of the Bolger patent.

Construction Not Similar

Whether this was a necessary element in the Bolger construction, we need not inquire. It was one of the elements of each of the claims in suit, and being one of the elements, must be considered as essential when infringement is under consideration. *Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U. S. 274, 278; *White v. Dunbar*, 119 U. S. 47; *McClain v. Ortmyer*, 141 U. S. 419, 423; *Gruendler Co. v. Hussman Co.*, 16 F. (2d) 571 (CCA 8); *Harris v. Ladd*, 34 F. (2d) 761 (CCA 8th).

The Bohn structure does not have this tight joint between the strips on the sides of the door opening and the corresponding strips on the sides of the door. The tight joint or sealing of the refrigerator in the Bohn structure is along the points of contact between the overlapping door and the outside covering of the refrigerator.

While the same result is accomplished as in the Bolger patent, the result is not accomplished in the same way. For these reasons, we think there was no infringement of claims 1 and 2 of the Bolger patent by the Bohn structure.

Bohn Patents Nos. 1,263,843 and 1,329,453

Turning to the Bohn patents, the object of the "A" invention is thus stated: "My invention relates to improvements in doors and more particularly to those doors adapted for use on refrigerators where the entire outside is of vitreous material, its object being to provide means for fastening the outer enameled sheathing to the inner portion of the door without running screws or other fastening means through the sheathing."

and the objects of the "B" invention are thus stated:

"One object of my invention is to provide a construction of the character designated, in which the outer sheathing is retained in position without the necessity of exterior fastening devices marring the exterior appearance of the refrigerator and without the necessity of drilling holes in the sheathing."

"Another object of my invention is to provide a construction in which the enameled upon the sheathing is protected against chipping or other injury as in the closing of the refrigerator door."

"My invention further consists in improved means for securing the enameled inner lining in position."

Claim 3 of 'A' Patent

Claim 3 of the "A" patent reads as follows:

"3. A door of the class described including an outer covering plate formed with inward edges, backing strips formed with flanges fitted under said edges and an inner door portion secured to said backing strips and holding the same in normal position for the purpose set forth."

Claim 5 of the "B" patent reads as follows:

"5. A refrigerator comprising a body portion formed with a door opening, and a door fitted thereto, enameled sheathing and lining plates covering said body portion and bent over the edges of the door opening, fastening means secured inside the door opening and overlapping said plates, enameled sheet metal sheathing and lining plates for said door, said plates overlapping the door edge,

and a non-metallic seat forming part of said door and contacting with the exterior sheathing of said refrigerator when said door is closed."

It is thus seen that the objects of both of these inventions were similar to the objects sought by the Bolger invention, and when the two Bohn patents are read in the light of the prior Bolger patent, it is apparent that there was very little of an inventive character shown in the Bohn patents.

It is claimed that the Bohn patents contemplate an overlapping door; and this, as we have already said, was not contemplated by the Bolger patent. It may be doubted whether the Bohn patents restrict the disclosures to an overlapping type of door; but even if there were such a restriction, the conclusion of invention would not follow.

Overlapping doors were old in the prior art, as shown by the patent to Stevenson, No. 697,689, issued April 15, 1902.

Other differences between the Bolger patent and the Bohn patents are relied upon to uphold the Bohn patents, such as the change in the form of a flange, the change in the form of a breaker strip, and the use of mitered backing strips.

These various minor differences which are claimed to differentiate the Bohn patents, from the Bolger patent are not set out in the claims of the Bohn patents, and it is to be noted that the Bolger patent was not cited in the prosecution of either of the Bohn patents in the patent office.

Doubtless the Bolger patent was unknown to Bohn when he worked out the structures disclosed in his two patents; and apparently the Bolger patent was overlooked by the Examiner in the Patent Office when the Bohn applica-

tions were pending; but these matters cannot change the result. The Bolger patent had been issued and had become part of the prior art before the dates when the Bohn applications were filed.

Our conclusion is that when the two Bohn patents are considered in the light of the prior art, and especially in the light of the Bolger patent, the minor differences disclosed in the Bohn patents do not rise to the dignity of invention, and the patents are invalid for that reason.

Other questions raised by counsel have been considered, but do not require discussion.

The decree is affirmed.

Filed Aug. 24, 1931.

CALIFORNIA MERCHANT OPENS HOUSEKEEPING SHOP

SAN FRANCISCO—O'Connor Moffatt & Co., furniture dealer since 1929, opened a new Good Housekeeping shop in its store on Sept. 21, the shop being equipped with General Electric and Norge electric refrigerators.

Miss Laurette LaMarr, home economist, gave a demonstration of cooking with an electric refrigerator on the opening day.

MOHAWK OFFICIALS MEET WITH OMAHA DISTRIBUTOR

OMAHA, Nebr.—Nebraska dealers meeting here recently at a meeting sponsored by the National Accessories, Inc., distributor for Mohawk refrigerators, were treated to a series of talks, a display of the complete line of Mohawk models, and a banquet.

APPLIANCE SALES OF GAS CO. SET RECORD

BROOKLYN—A new all-time record in appliance sales was established during August by the Brooklyn Union Gas Co. when sales mounted to \$300,519.47, the highest total in the history of the company. August business exceeded by \$1,618.67 the former record established in June of this year.

The record is traceable to the fact that wholesale sales made during August rose to \$172,185.95, an increase of nearly \$10,000 over the June total. Retail sales lagged about \$8,000 behind those of June, but the increase in wholesale business was sufficient to more than balance this loss.

More than \$145,000 worth of Electrolux gas refrigerators were sold at wholesale during the month, a figure which is more than \$15,000 higher than the previous record for 1931.

Electrolux sales constituted about 85 per cent of the wholesale business done during the period.

22 G. E. REFRIGERATORS TO BE PLACED IN NEW BUILDINGS

NEW HAVEN, Conn.—Installation of 12 General Electric SS-42 refrigerators in the Philip Marshall apartments, West Haven, and 10 of the same model in the Woodruff apartments, West Haven, has been announced by Miss Anne Johnstone, assistant manager of the New Haven branch of Modern Home Utilities, Inc., G. E. distributor.

BUSH FINNED TUBING

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Room Coolers and Air Conditioning Systems



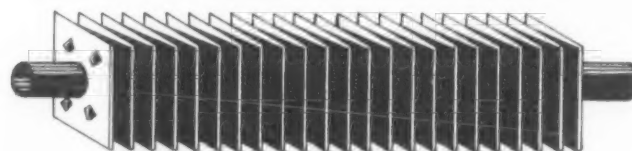
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Little Stories of Interesting
PEOPLE
In the Refrigeration Industry

THE EXPANSION VALVE

By George F. Taubeneck

Little Stories of Interesting
IDEAS
In the Refrigeration Industry

Club Car Reading

Bruce Barton and B. C. Forbes have been preaching for some time that what we need to do is get back to fundamentals, to the simple things of life.

To their eminent voices has been added that of Charles F. Kettering (now all they need is a good bass voice and they'll have a quartet). In the Sept. 26 *Saturday Evening Post*, the head of General Motors Research Laboratories states:

"Too many people are resorting to formulas, not going back to fundamentals. . . . Now it seems to me that the very thing we did do was to lose sight of the fundamentals."

Month after month, Messrs. Barton and Forbes have pleaded for a return to a bread-and-milk existence, to frugality and simplicity, to the old-fashioned virtues.

All these preachments have apparently had their effect upon the man who selected magazines for Pullman club cars. A decided change has occurred in the choice of these periodicals within the last month or so.

Formerly one found *Time*, *Saturday Evening Post*, *The New Yorker*, *Cosmopolitan*, *Atlantic Monthly*, *Scribner's*, *Harper's*, *American Mercury*, *Life*, and *Judge*.

Today you will have great difficulty in locating any of the above papers except *Time* and the *Saturday Evening Post*.

Instead you will likely find several copies of the *Post*, and a number of copies of the *American* magazine, supplemented by Pullman publications.

This change may be accidental. More than likely it is significant.

The Official Selector of Periodicals either thinks it high time the traveling public cease reading the highbrow, high hat, highfalutin' publications and settle down to a simple, sober diet of reading, or else a demand has arisen for the *American* magazine and for more copies of the *Satevepost*.

Magazine readers are returning to simplicity.

An Old Friend

Forced into it by absence of anything else to read, I picked up a copy of the *American* in a club car on the road to Atlanta last week.

In two places therein was mentioned the name of a prominent merchandiser of electric refrigerators. Guess who. You're wrong. Rex Cole!

In Ida M. Tarbell's story about Owen D. Young, chairman of the board of the General Electric Co., the following incident is related:

"Along in 1923 he decided to electrify the town at his own expense—if he could get the power. But that was not so easy as it looked. The nearest lines were 12 miles away. One of his enthusiastic and admiring friends—Rex Cole, a successful apostle of better lighting—actually persuaded the company, whose lines were 12 miles away, that as an experiment it was worth their going up Otsuquig Creek. It was only after he had won their consent that he brought in Mr. Young's name . . .

"And this was Christmas Eve. There had been many delays in getting over the hills. Mr. Young's heart was set on an electrically lighted town Christmas tree. The town itself was wired in conduits—no disfiguring poles; the street lamps were up; everything was ready to turn on—at Mother Young's—at Uncle Abe's—in the two churches; the tree was trimmed. But the last wired pole was still a half-mile away. Then Rex Cole appeared in hip boots and storm jacket, for the snow was deep, and himself strung wires and made the final connections. It was dusk when the current was turned on and houses, streets, and Christmas tree burst into light."

On the last page of this magazine Bruce Barton comments:

"It was Rex Cole . . . who first introduced me to Raymond Hood. Each is a genius in his own way, and neither has been the least bit spoiled . . . It is interesting to find him (Hood) agreeing with Kelland about the wastefulness of too much planning. 'Never decide today,' he says, 'what you are going to do tomorrow.'"

"Rex, I think, would go even farther. You never know from minute to minute where he will break out next."

A Midafternoon Raid



Kitty Lou Dow, daughter of Paul Dow, manager of General Electric Refrigeration Institute, is caught in the act of making a midafternoon popsicle raid on the family refrigerator.

Lawyers Profit By Depression

In another article, the head of the Batten, Barton, Durstine and Osborne advertising agency records an interesting footnote on one result of the depression. We quote:

" . . . the times are troubled. Men's nerves are on edge, and little things that would be passed over lightly in good times are every day becoming the cause of quarrels . . .

"My friend, the lawyer, reports: 'Business is good . . . Everybody is quarreling. Everybody is suing everybody. Partnerships are breaking up. Husbands and wives are getting divorced. Concerns are going bankrupt. Things are excellent!'"

Marion Sawyer

If the good people of Atlanta haven't heard of Marion Sawyer by this time, it's because they never leave home and never read the papers.

Upon arriving in Atlanta last week, I procured a copy of the *Constitution*. On almost every page was a picture of Kelvinator's home economics director. Advertisement after advertisement told the story of her cooking school, mentioning incidentally that Miss Sawyer endorsed their products.

Her school (official title: "The Constitution-Kelvinator Cooking and Refrigeration School") was conducted in the sixth-floor restaurant of the Davison-Paxon department store. Well publicized, it drew crowds of women.

A. & P. stores advertised that they furnished all the foods for Miss Sawyer's school. Georgia "Bro-lo," a canned "Brunswick stew," told the world that Marion Sawyer used it. Pedigree Dairies spent considerable money advertising the fact that Miss Sawyer had selected Pedigree milk for use in her school. And a Canova coffee ad quoted her as follows:

"There's uniform quality and goodness in every can of Canova coffee—that's why I always select it."

All over Atlanta, store window displays centered attention on her picture, against a background of products she was using in her demonstrations.

Thursday afternoon she appeared at the meeting of the Frozen Foods Association of America at Experiment, Ga., proudly escorted by John Davenport of the Davison-Paxon store.

She was immediately called upon for a speech, but just as quickly made it clear that she had come not to teach, but to learn.

Not afraid to ask, she put many pertinent questions to some of the speakers. Intelligent questions, too—questions that sometimes caused considerable fumbling and passing

of the buck before anyone answered them.

Miss Sawyer has big blue eyes, gray bobbed hair, a wideawake expression, a clear voice, and is small.

Henry Torrance

Henry Torrance stands out in a crowd. He is president of the Carbon-dale Machine Co., and looks it. Thin, nervous, alert, neat, he has an air about him as of one who knows what's what and why.

At the meeting of the frozen foods group last Thursday at the Georgia Experiment Station, Mr. Torrance was one of the most meticulously dressed men present. He also appeared to be one of the best informed.

And after sitting beside him for an afternoon, I began to understand how he gets his information. He didn't miss a word of the discussions. Took copious notes. Asked leading questions. Wanted to know why.

Here was an executive who looked

and acted like an executive; yet he had the attitude of one who wants to begin at the beginning and find out about everything—a true inquiring mind.

Passage of years means little to a man like that. His open, receptive, searching mind will stay young and flexible so long as there is anything to be learned, anything new to be seen or tried.

Experiment, Ga.

A short distance from Atlanta is Griffin. And hanging on Griffin's skirts is Experiment—so named because of the location there of the Georgia Experiment Station.

At this state agricultural research laboratory, which is partly supported by U. S. Department of Agriculture funds, was developed the whole Southern frozen foods movement.

The two men largely responsible for this movement are H. P. Stuckey, director of the station, and J. G. Woodroof, horticulturalist.

Mr. Stuckey is a lovable old gentleman of the soil, rugged yet polished, strong yet diplomatic. Public relations are his forte.

An intense young man with true scientific fervor for facts, horticulturalist Woodroof is the man who has conducted all the experiments, discovered the information which has pulled considerable Southern capital out of banks and into circulation.

He is still studying, still experimenting, still learning. Daily he becomes more enthusiastic over his research.

Cohorts of Woodroof in his investigations are thin, wiry, Chief Chemist K. T. Holley, and ample, clear-eyed, self-possessed Dr. Leah Ascham, station home economist.

On the Job

Very much on the job at the F. F. A. A. meeting were representatives of electric refrigeration manufacturers.

E. W. Holtson of Frigidaire came down from Dayton for the sessions. He was accompanied by E. E. Bockock, dark, engaging, accommodating Frigidaire representative attached to the Atlanta office.

B. R. Patton and G. H. Swearingner of the W. D. Alexander Co., General Electric refrigerator distributor, were there.

So, too, was J. Kilian of the Atlanta office maintained by the Vilter Mfg. Co., and E. B. McDonagh, Atlanta representative of the Creamery Package Mfg. Co.

Marion Moore, Copeland sales representative, was much in evidence. Moore is a tall young man

who has the courage of his convictions.

Moore spoke right out in meeting, had facts on his tongue's tip, and commanded attention and respect by his presentation of them.

Moore used to be with the Warren Refrigerator Co. in Atlanta, and still works closely with V. P. Warren and his organization.

Comer, Irwin, Rankin, Tucker, Grayson

An expert in freezing by use of carbon dioxide "snow" is W. T. Comer of the Coca Cola Co. His Crystal Carbonic Laboratories in Atlanta have housed many a quick-freezing experiment.

Mr. Comer says that the quick-freezing industry has "run away from him." He has "been in on" the movement from the beginning, watches all developments dispassionately, continues to experiment and gather information, and counsels conservative action.

J. C. Irwin, Jr., of the United States Cold Storage Co. in Atlanta, is what the folks back in my old home town would call a "live wire."

Keeping pace with latest developments in refrigeration, he is frequently called upon to read papers at technical and engineering gatherings, is always ready to volunteer with authoritative information.

F. J. Rankin has been assigned by Du Pont Cellophane to keep track of quick-freezing activities. This he does by chasing around all over the country. He was undoubtedly one of the best-known men at the F. F. A. A. gatherings. Small, dark, smiling, informed, he is a salesman always.

A born promoter, W. R. Tucker is the man who took the findings of the Georgia Experiment Station and presented them to influential Georgia citizens in so appealing a manner that several quick-freezing plants were established down there this year.

At present he is engaged in the organization of Icebound Products, a quick-freezing concern. He is a square-built man, dark, good-humored, calm, and possesses a most convincing sincerity.

Ralph V. Grayson of Polar Products, Inc., engineer who designed the orange juice freezing plant at Tampa for National Dairy Products Corp., is a two-fisted engineer.

At the F. F. A. A. meeting he made a fighting speech which shook the timbers of the hall, the sum and substance of which speech was that the quick-freezing of orange juice may be down but is far from out, and that lessons learned this year will help next year be a profitable one for the industry.

Grayson is a big, broad-shouldered fellow who possesses strength and energy as well as technical perspicacity.

Soviet Prize

Details of the Russian five-year plan sometimes work out slowly.

Late in 1929 the National Bureau of Commerce of the Soviet Republic announced an international contest on designs and data for the construction of refrigerated food storage houses.

This contest, sponsored by the Amtorg Trading Corp. of New York (Soviet authority in America) closed in March, 1930.

Well before that time plans had been submitted, written in Russian and employing the metric system, by Charles W. Dombitsky of San Francisco.

Not until late this summer was Mr. Dombitsky informed that he had been awarded a prize of 600 rubles (\$304.74) for his plans.

Dombitsky is a member of the A. S. R. E. and a past president of the N. A. P. R. E. He was educated in Odessa, and has been in America since 1911.

Thief! Robber!

For more than a month Mrs. Joseph DeRay of 1316½ E. Jefferson Ave., Detroit, has been dropping quarters in the slot of a Meter-Ice device on her electric refrigerator.

One day her milk began to sour, her butter showed liquid tendencies. Looking into the matter, she discovered that a burglar had jimmied the lock on the coin box, and taken about \$2.50 from it. A new racket!

Scarlet Fever

Salesman Fleming of the Consumers Gas Co. of Toronto recently sold an Electrolux refrigerator in a home regardless of the fact that it bore a big card marked "Scarlet Fever," according to W. A. Rarison of Electrolux Refrigerator Sales, Inc., Evansville.



Editor on Wheels

(Concluded from Page 8, Column 4)
Hot, southern cooking, with corn-bread sticks and everything.

Guests linger long over meals. The South's famed beautiful women are there, in abundance.

The entire effect makes one feel like a Maxwell House coffee advertisement.

Annually the Metropolitan Grand Opera company visits Atlanta. There is good music to be had, and an occasional play. Marvelous golf (it's the home of Bobby Jones, you know), at Brookhaven, East Lake, Druid Hills, Piedmont, Park. Bobby Jones learned his golf at East Lake.

Smooth highways for fast driving, 600 miles of them. Almost as many parks as Kansas City.

All kinds of outdoor sports thrive. Polo, for instance. The city is rabidly interested in the progress of its baseball team, the "Crackers." Sometimes the fever runs as high as it does currently in St. Louis.

And Bobby, of course, is the Lindbergh of Atlanta.

Atlanta is a city which moves as do northern cities. It has been the Canaan of opportunity for ambitious young southern boys.

And because of its northern drive, its eddying business activities, and its fondness for hard-played sport, it does not seem quite so patrician as other southern cities.

Yet it's over-running with history, with old families, with the storied "hospitality" of the South, with cultural pursuits. And with negroes.

The latter are better housed and more prosperous in Atlanta than in practically any other city in the country.

Just for these negroes are several colleges and institutions of higher learning, including Atlanta University, Spelman College for girls, Morris Brown University, and Holmes Institute.

Other educational institutions include Georgia Tech, noted nation-wide for its "Golden Tornado" football teams, Oglethorpe University (beautiful Gothic architecture and a football coach who is one of the sweetest tenor singers in the South), Georgia Military Academy, Atlanta Southern Dental College, and Marist College.

Just 90 miles away is Martha Berry's celebrated school for the sons and daughters of the moonshiners.

Atlanta's moonshine, by the way, is potent stuff.

A word to the wise: Cut in half any preconceived notions you may have had regarding your capacity for liquid refreshment before sampling any of this "corn likker" from the hills.

It's dynamite.

L. H. BENNETT CO. LEASES 5-STORY OFFICE BUILDING

SAN FRANCISCO—L. H. Bennett Co., Ltd., San Francisco, distributor for General Electric refrigerators in northern California and western Nevada, recently signed a lease taking over a five-story building centrally located in the city's shopping area.

The building will be converted into a modern display room and office building, the main floor of which will be for a complete household and domestic display of General Electric refrigerators, while the upper floors will be utilized for the company's general offices and meeting rooms.

The corporation started in business in 1927 and has built up a sales organization of 10 branch stores located in San Francisco, Oakland, Berkeley, Sacramento, Stockton, San Jose, Palo Alto, and Burlingame. It has a sales personnel of about 125 men.

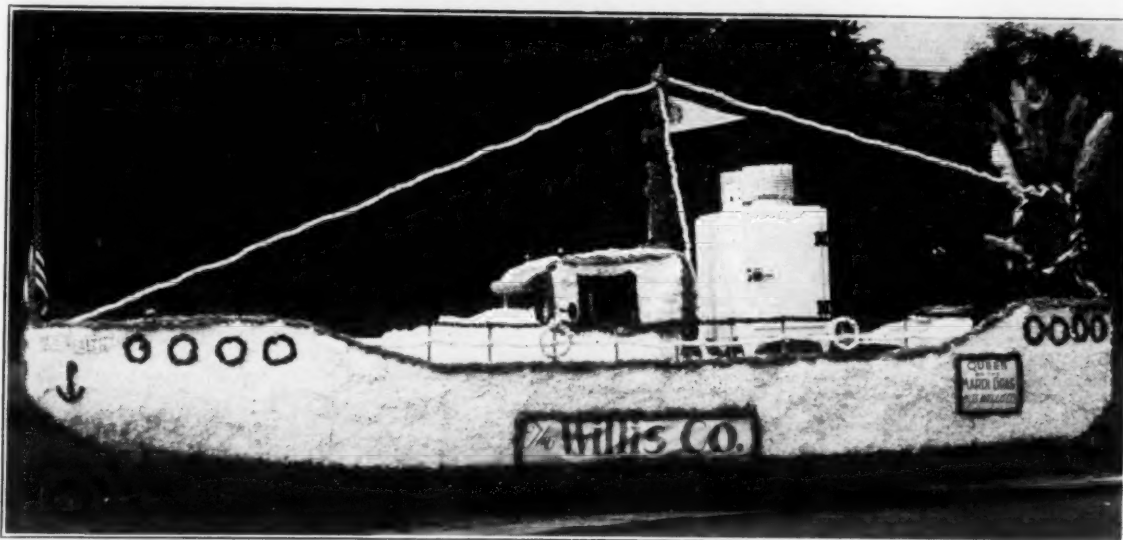
31 OREGON, WASHINGTON SERVEL DEALERS WIN TRIP

SEATTLE—J. C. Williams, manager of the Servel division of Harper-Meggee, Inc., northwest distributor, was in charge of 31 Servel dealers from Oregon and Washington, who won in the Servel sales contest, and who made the trip to Evansville this week.

BALTIMORE STORE APPOINTS NORGE SALES DIRECTOR

BALTIMORE, Md.—Hochschild, Kohn & Co., department store, has placed the direction of sales of the Norge electric refrigerator under C. H. Coombe, radio department manager.

Fit for a Queen



The steamship float of Willis Co., General Electric distributor at Canton, Ohio, and Akron, Ohio, provided the throne for the queen of the recent Canton pageant. The float won the prize offered for the best entry.

BROOKLYN APPLIANCE WINNERS GET PRIZES

BROOKLYN—Prizes offered in the recent altitude contest on appliance sales conducted by the Brooklyn Union Gas Co. were presented recently to the winners at a general assembly of all new business department employees, held in the general office auditorium.

The presentations were made by Hugh H. Cuthrell, manager of the department.

The cash prize winners were:

Old district salesmen (group one)—Harry Schroeder, Brooklyn branch, \$25; Fred Roberts, Newtown branch, \$15; and Jayson M. Brice, Nassau branch, \$10.

Sales floor people (group two)—Lovat Cornwell, Brooklyn branch, \$25; Andrew Welsh, Jamaica branch, \$15; and Horace M. Herndon, Metropolitan branch, \$10.

New district salesmen (group three)—W. P. Waddell, Brooklyn branch, \$25; John Galarci, Metropolitan branch, \$15; and James F. Eagan, Flatbush branch, \$10.

Edward Grogan, Flatbush branch, won first prize in the refrigerator division, winning an Electrolux unit.

Linking the Interests of Three Great Industries

ELECTRICAL
INDUSTRY

*Electric
Refrigeration
News*

REFRIGERATION
INDUSTRY

*Refrigerated
Food
News*

FOOD
INDUSTRY

Diagrammatically, above, is portrayed the service of ELECTRIC REFRIGERATION NEWS and REFRIGERATED FOOD NEWS to three great industries which have important mutual interests.

Five years ago, in September, ELECTRIC REFRIGERATION NEWS was launched. It focused attention upon the mutuality of interest between the electrical and the refrigeration industries. To each group it brought the viewpoint and the problems of the other. To each it interpreted the opportunities for profit through coordinated effort. One industry produced the *equipment* and the other industry provided the *service* which made the units operative. Both had much to gain by working together.

Today another huge industry has been brought into exceedingly important relationship with refrigeration. The trend of events indicates that refrigeration has come to represent the greatest single opportunity for progress in the production, transportation, distribution and preparation of *food*. Far-seeing food industry executives are aware of the great opportunities afforded them by refrigeration developments. Far-seeing refrigeration executives are studying the problems of food producers and merchants.

At this most opportune time is presented REFRIGERATED FOOD NEWS as a medium of

common interest to these two great industries. It will serve as a *connecting link* between those who provide the service of *refrigeration* and those who sell the *food* which is protected by the equipment.

Specifically, REFRIGERATED FOOD NEWS will discuss the problems of the butcher, the grocer, the delicatessen, the restaurant, the hotel, the packer and the transportation company. It will present the news of developments in the production, packing, packaging, transportation, distribution, storage and display of refrigerated foods. It will discuss temperatures and proper handling and display methods. For food selling and food service establishments it will suggest the most profitable methods of *merchandising* refrigerated food.

Already executives in some of the largest food packing and chain store organizations in the country are numbered among subscribers to REFRIGERATED FOOD NEWS. Among others it will reach are dairy owners, ice cream manufacturers, meat merchants, grocers, food wholesale and distributing organizations, confectioners and bakers, large hotel and restaurant owners.

REFRIGERATED FOOD NEWS will serve as a *connecting link*, a paper designed to educate the refrigeration industry in the realm of food and the food industry in the realm of refrigeration.

Dealers and Salesmen; Arrange to see that REFRIGERATED FOOD NEWS reaches your commercial prospects regularly. It will tell them about food merchants and food service establishments which have installed modern refrigeration equipment. It will stimulate their interest in making "bigger profits through better refrigeration."

You may obtain copies in bulk for distribution or order papers mailed to your prospects (\$1.00 per year—12 issues—or 10c per copy).

Business News Publishing Co., 550 Maccabees Bldg., Detroit, Mich.

Manufacturers of Refrigeration Systems

Preliminary Listing
for 1932 Directory

Manufacturers of complete refrigeration systems, domestic and commercial, together the three major parts of complete systems (compressors, cooling units and cabinets) are included in this preliminary listing for the 1932 REFRIGERATION DIRECTORY. Also included are manufacturers of specialized equipment, such as water coolers, ice cream cabinets, milk coolers, ice cream freezers, soda fountains, bottle coolers and room coolers.

All manufacturers whose names appear in this listing have furnished information regarding their products by answering a questionnaire issued by ELECTRIC REFRIGERATION NEWS.

Companies except those with an asterisk (*) after their names have returned the information blank with literature descriptive of the products. An asterisk (*) indicates that literature was not furnished describing the product under that classification.

Questionnaires were sent to all companies known to be manufacturing each of these classifications of products.

Manufacturers of products in any of these classifications who are not listed are invited to send complete information.

These product classifications, with much additional information, will be repeated in the 1932 REFRIGERATION DIRECTORY to be published in December.

DOMESTIC SYSTEMS

Domestic electric refrigeration, self-contained systems (or for remote installation when cabinet is included) complete with machine, cooling unit and cabinet.

Alphonse Brenner Co., Inc. (*)
1229 Texas Ave., Shreveport, La.
Apex Electrical Mfg. Co., Cleveland, O.
Automatic Refrigerator Corp.
221 N. LaSalle St., Chicago, Ill.

Belding-Hall Co., Belding, Mich.
Canton Refrigerators, Inc. (*)
250 W. 49th St., New York, N. Y.
Central Machine Co. (*)
1050 Mt. Elliott St., Detroit, Mich.
Copeland Products, Inc.
332 Cass Ave., Mt. Clemens, Mich.
Dayton Refrigeration Corp.
520 Kiser St., Dayton, O.
Frigidaire Corp., Dayton, O.
Frig-O-Matic, Ltd. (*)
135 Nelson St., Brantford, Ont., Can.
General Electric Co.
Electric Refrigeration Dept., Hanna Bldg., Cleveland, O.
Gibson Refrigerator Co., Greenville, Mich.
Gurney Refrigerator Co., Fond du Lac, Wis.
Heinz & Munschauer
20 Superior St., Buffalo, N. Y.
Holbrook Mfg. Co. (*)
6917 McKinley Ave., Los Angeles, Calif.
Iceaire Corp. (*), Durand, Mich.
Iceberg Mfg. Co., Gardner, Mass.
Ice-master Co. (*), Haverhill, Mass.
Illinois Moulding Co. (*)
2411 W. 23rd St., Chicago, Ill.
International Oil Heating Co. (*)
3808 Park Ave., St. Louis, Mo.
Kelvinator Corp.
14250 Plymouth Rd., Detroit, Mich.
Keokuk Refrigerating Co. (*), Keokuk, Ia.
Kohlenberger Engineering Corp. (*)
805 S. Spadra St., Fullerton, Calif.
Kulair Corp. (*)
1428 S. Penn Square, Philadelphia, Pa.
Leonard Refrigerator Co.
14260 Plymouth Rd., Detroit, Mich.
Maine Mfg. Co., Nashua, N. H.
Merchant and Evans Co.
2035 Washington Ave., Philadelphia, Pa.
Mitycold Corp.
839 Society for Savings Bldg., Cleveland, O.
Modern Refrigeration Co., Belleville, Ill.
Norge Corp.
670 E. Woodbridge, Detroit, Mich.
O'Keefe and Merritt Co. (*)
3700 Mines Ave., Los Angeles, Calif.
Rice Electric Refrigeration, Inc. (*)
36 Flatbush Ave., Brooklyn, N. Y.

J. Rose & Co., Inc.
615 W. 59th St., New York, N. Y.
Sanitary Refrigerator Co. (*)
Fond du Lac, Wis.
Sanitice Corp. (*)
60 E. 42nd St., New York, N. Y.
Serval Sales, Inc., Evansville, Ind.
Starr Co., Richmond, Ind.
Studner Brothers, Inc. (*)
245 5th Ave., New York, N. Y.
Super Oil Heater Sales Co.
613 Connecticut Blvd., Hartford, Conn.
Tennessee Furniture Corp. (*)
Chattanooga, Tenn.
Trupar Mfg. Co.
140 Davis Ave., Dayton, O.
Uniflow Mfg. Co.
E. Lake Rd., Erie, Pa.
Universal Cooler Corp.
1214 18th St., Detroit, Mich.
Warner Steel Products Co., Ottawa, Kan.
Weir, Wheelock Co., Inc.
56 Warren St., New York, N. Y.
Welsbach Co. (*), Gloucester City, N. J.
Westinghouse Elec. & Mfg. Co., Mansfield, O.
Williams Oil-O-Matic Heating Corp.
Bloomington, Ill.
Zerozone Corp.
939 E. 95th St., Chicago, Ill.

COMMERCIAL SYSTEMS

Commercial electric refrigeration self-contained systems (or for remote installation when cabinet is included) complete with machine, cooling unit and cabinet (not including special applications, such as water cooler, ice cream, soda fountain, dairy units, room coolers or built-in cold storage rooms)

Associated Piping & Engineering Co., Ltd. (*)
1915 E. 51st St., Los Angeles, Calif.
Copeland Products, Inc.
332 Cass Ave., Mt. Clemens, Mich.
Fresno Show Case & Fixture Co. (*)
1805 Anna St., Fresno, Calif.
Frigidaire Corp., Dayton, O.
General Electric Co.
Electric Refrigeration Dept., Hanna Bldg., Cleveland, O.
Gurney Refrigerator Co., Fond du Lac, Wis.
Holbrook Mfg. Co. (*)
6917 McKinley Ave., Los Angeles, Calif.
Kelvinator Corp.
14250 Plymouth Rd., Detroit, Mich.
Marinette Show Case Co. (*)
Marinette, Wis.
Potter Refrigerator Corp.
101 N. Ninth St., Portland, Ore.
Puffer-Hubbard Mfg. Co., Minneapolis, Minn.
Serval Sales, Inc., Evansville, Ind.
Starr Co., Richmond, Ind.
Universal Cooler Corp.
1214 18th St., Detroit, Mich.

ABSORPTION SYSTEMS

Domestic and commercial gas absorption type refrigeration systems.

Electrolux Refrigerator Sales, Inc.
Evansville, Ind.
Schwartz System Mfg. Co. (*)
2127 Washington St., Kansas City, Mo.

DOMESTIC CABINETS

Domestic refrigerator cabinets designed for self-contained (or remote installation) refrigeration systems.

Albatross Steel Furniture Co., Ltd. (*)
Los Angeles, Calif.
Anderson Show Case Mfg. Co. (*)
321 Filmore St., N. E., Minneapolis, Minn.
Belding-Hall Co., Belding, Mich.
Cabrante Corp. (*)
Calumet and Holliday Sts., Michigan City, Ind.
Commercial Refrigerator Mfg. Co., Ltd.
1020 E. 59th St., Los Angeles, Calif.
Crystal Refrigerator Co., Fremont, Nebr.
Eau Claire Cold Storage Corp. (*)
Eau Claire, Wis.
D. Eddy & Sons Co. (*)
336 Adams St., Dorchester, Mass.
General Steel Wares, Ltd. (*)
199 River St., Toronto, Ont., Can.
Gibson Refrigerator Co., Greenville, Mich.
Gurney Refrigerator Co., Fond du Lac, Wis.
Heinz & Munschauer
20 Superior St., Buffalo, N. Y.
Herrick Refrigerator & Cold Storage Co.
1019 Commercial St., Waterloo, Ia.
Holbrook Mfg. Co. (*)
6917 McKinley Ave., Los Angeles, Calif.
Illinois Refrigerator Co., Morrison, Ill.
Leonard Refrigerator Co.
14260 Plymouth Rd., Detroit, Mich.
Maine Mfg. Co., Nashua, N. H.
McCray Refrigerator Co. (*)
Kendallville, Ind.
Motors Metal Mfg. Co. (*)
5936 Milford Ave., Detroit, Mich.
Puffer-Hubbard Mfg. Co., Minneapolis, Minn.
Refrigerating Equipment Co.
Wilmington, Del.
Renfrew Refrigerator Co., Ltd.
Renfrew, Ont., Can.
Rex Mfg. Co., Inc., Connersville, Ind.
Rhinelander Refrigerator Co. (*)
Rhinelander, Wis.
Ruddy Mfg. Co., Ltd. (*)
Brantford, Ont., Can.
Sanderson-Harold Co., Ltd., Paris, Ont., Can.
Seeger Refrigerator Co., St. Paul, Minn.
Steel-Craft Mfg. Co. (*)
4617 Arthington St., Chicago, Ill.
Halsey W. Taylor Co., Warren, O.
Tennessee Enamel Mfg. Co. (*)
Nashville, Tenn.
Tennessee Furniture Corp. (*)
Chattanooga, Tenn.
Ward Refrigerator & Mfg. Co. (*)
6801 S. Alameda St., Los Angeles, Calif.

COMMERCIAL CABINETS

Commercial refrigerator cabinets, including display cases, wall coolers and walk-in coolers, but not including water coolers, ice cream cabinets, milk coolers, bottle coolers, ice cream freezers, soda fountains, and room coolers.

Acorn Opalite-Metal Specialties Co., Inc. (*)
1052 W. Monroe St., Chicago, Ill.

Allied Store Utilities Co.
Hussman Refrigerator Division
2401 N. Leffingwell Ave., St. Louis, Mo.
Amesbury Brass & Foundry Co.
Amesbury, Mass.
Anderson Show Case Mfg. Co. (*)
321 Filmore St., N. E., Minneapolis, Minn.
Anheuser, Busch, Inc. (*), St. Louis, Mo.
F. A. Atherton Co. (*)
51 Commercial St., Worcester, Mass.
Banta Refrigerator Co., Inc., Clearfield, Pa.
Belding-Hall Co., Belding, Mich.
Buyers Door & Mfg. Co., Ltd.
374 Pacific Ave., Toronto, Ont., Can.
Campbell Refrigerator Co.
3208 W. Auer Ave., Milwaukee, Wis.
Chadwick & Carr Co. (*)
North and Cross Sts., Boston, Mass.
Cincinnati Butchers' Supply Corp. (*)
1972 Central Ave., Cincinnati, O.
Cir-Cul-Air Refrigerator Corp.
3909 S. Broadway, St. Louis, Mo.
Columbus Show Case Co.
826 W. Fifth Ave., Columbus, O.
Commercial Refrigerator Mfg. Co., Ltd. (*)
1020 E. 59th St., Los Angeles, Calif.
Consolidated Equipment Corp. (*)
Greenville, Mich.
Cruse Refrigerator Co., Inc., Louisville, Ky.
Crystal Refrigerator Co., Fremont, Nebr.
Dairy Refrigeration Co.
811 S. 72nd St., Milwaukee, Wis.
Downing Mfg. Co., Downing, Wis.
Drayer & Hanson, Inc. (*)
738 E. Pico St., Los Angeles, Calif.
"Dry-Kold" Refrigerator Co., Niles, Mich.
Eau Claire Cold Storage Corp. (*)
Eau Claire, Wis.
E. Ehrlich & Sons Mfg. Co., St. Joseph, Mo.
Elkins Refrigerator & Fixture Co. (*)
5201 Denison Ave., Cleveland, O.
Eureka Refrigerator Co., Ltd.
Owen Sound, Ont., Can.
Fresno Show Case & Fixture Co. (*)
1805 Anna St., Fresno, Calif.
Ed Friedrich (*),
1117 E. Commerce, San Antonio, Tex.
Frigidcase
1737 N. Paulina St., Chicago, Ill.
General Steel Wares, Ltd. (*)
199 River St., Toronto, Ont., Can.
Gibson Refrigerator Co., Greenville, Mich.
Bernard Gloekler Co.
1627 Penn Ave., Pittsburgh, Pa.
Grand Rapids Cabinet Co.
420 Alabama Ave., N. W.,
Grand Rapids, Mich.
Grand Rapids Store Equipment Corp.
1545 Madison Ave., Grand Rapids, Mich.
John Herrel & Sons, Inc. (*)
244 Gear St., Columbus, O.
Herrick Refrigerator & Cold Storage Co.
1019 Commercial St., Waterloo, Ia.
C. V. Hill & Co., Inc.
360 Pennington Ave., Trenton, N. J.
Holbrook Mfg. Co. (*)
6917 McKinley Ave., Los Angeles, Calif.
Holcomb & Hoke Mfg. Co.
Indianapolis, Ind.
Koch Butchers' Supply Co. (*)
North Kansas City, Mo.
C. B. Liver Co.
1510 Capitol Ave., Omaha, Nebr.
Lorillard Refrigerator Co.
85 Grand St., Kingston, N. Y.
McCray Refrigerator Co. (*)
Kendallville, Ind.
Mills Novelty Co. (*)
4100 Fullerton Ave., Chicago, Ill.
Minneapolis Show Case & Fixture Co.
197 E. Island Ave., Minneapolis, Minn.
Northey Mfg. Co., Waterloo, Ia.
Ottenheimer Brothers, Inc.
Fullaway & Hiltens Sts., Baltimore, Md.
Pechman Store Equipment Co., Inc. (*)
211 W. 19th St., New York, N. Y.
C. L. Percival Co., Des Moines, Ia.
P. B. Polhemus Co. (*)
110 W. 34th St., New York, N. Y.
Puffer-Hubbard Mfg. Co., Minneapolis, Minn.
Fay Rodgers Refrigerator Works
Box 2573, Desoto Sta., Memphis, Tenn.
Ruddy Mfg. Co., Ltd. (*)
Brantford, Ont., Can.
Sanders Butcher Supply Co.
2601 Michigan Ave., Detroit, Mich.
Sanderson-Harold Co., Ltd., Paris, Ont., Can.
Schodder Mfg. Co. (*)
170 17th St., Wheeling, W. Va.
Seeger Refrigerator Co., St. Paul, Minn.
Sherer-Gillett Co., Marshall, Mich.
Smoot-Holman Co. (*)
320 N. Damask St., Inglewood, Calif.
Standard Refrigerator Co., Inc.
2539 Germantown Ave., Philadelphia, Pa.
St. Louis Butchers' Supply Co. (*)
1545 N. 15th St., St. Louis, Mo.
Valade Refrigerator Corp. (*)
6560 Mack Ave., Detroit, Mich.
Viking Refrigerators, Inc. (*)
7500 Independence Rd., Kansas City, Mo.
Ward Refrigerator & Mfg. Co. (*)
6801 S. Alameda St., Los Angeles, Calif.
Warren Co.
905 Fair St., S. E., Atlanta, Ga.
Weber Showcase & Fixture Co., Inc. (*)
5700 Avalon Blvd., Los Angeles, Calif.

COMPRESSORS

Compressors for refrigeration systems, domestic, commercial or industrial, including designs for special applications, such as water coolers, ice cream cabinets, soda fountains, dairy units, bottle coolers and room coolers.

Absopure Refrigerator Co. (*)
Division of Universal Cooler Co.
1560 Theodore St., Detroit, Mich.
American Engineering Co., Philadelphia, Pa.
Anheuser, Busch, Inc. (*), St. Louis, Mo.
Armstrong Ice Machine Co. (*)
518 W. First St., Spokane, Wash.
Audiffren Refrigerating Machine Co.
285 Madison Ave., New York, N. Y.
Baker Ice Machine Co., Inc. (*)
1518 Evans St., Omaha, Nebr.
Bedell Engineering Co. (*)
2869 W. Pico St., Los Angeles, Calif.
E. W. Bliss Co. (*), Salem, O.
Alphonse Brenner Co., Inc. (*)
1229 Texas Ave., Shreveport, La.

Brunswick-Kroeschell Co.
New Brunswick, N. J.
Canton Refrigerators, Inc. (*)
250 W. 49th St., New York, N. Y.
Carbondale Machine Co., Carbondale, Pa.
Carbondale Machine Co.
Excelsior Division, S. Norwalk, Conn.
Central Machine Co. (*)
1050 Mt. Elliott St., Detroit, Mich.
Cooper Bessemer Corp., Mt. Vernon, O.
Creamery Package Mfg. Co.
1243 W. Washington Blvd., Chicago, Ill.
Dairy Refrigeration Co.
811 S. 72nd St., Milwaukee, Wis.
Dayton Refrigeration Corp.
520 Kiser St., Dayton, O.
Deissler Machine Co. (*)
31 N. Mercer St., Greenville, Pa.
Frick Co., Waynesboro, Pa.
Geiser Mfg. Co., Inc. (*), Waynesboro, Pa.
General Refrigeration Sales Co.
627 Seventh St., Rockford, Ill.
Haven Mfg. Co. (*)
530 W. Lapham St., Milwaukee, Wis.
Holbrook Mfg. Co. (*)
6917 McKinley Ave., Los Angeles, Calif.
Houde Engineering Corp.
537 E. Delavan Ave., Buffalo, N. Y.
Howe Ice Machine Co.
2825 Montrose Ave., Chicago, Ill.
Iceaire Corp. (*), Durand, Mich.
Iceberg Mfg. Co., Gardner, Mass.
Ice-master Co. (*), Haverhill, Mass.
Illinois Moulding Co. (*)
2411 W. 23rd St., Chicago, Ill.
International Oil Heating Co. (*)
3808 Park Ave., St. Louis, Mo.
Jarvis Engineering Co. (*)
51 Ellery St., South Boston, Mass.
Jenckes Knitting Machine Co. (*)
180 Weeden St., Pawtucket, R. I.
Keokuk Refrigerating Co. (*), Keokuk, Ia.
Kohlenberger Engineering Corp. (*)
805 S. Spadra St., Fullerton, Calif.
Kulair Corp. (*)
1428 S. Penn Square, Philadelphia, Pa.
Merchant and Evans Co.
2035 Washington Ave., Philadelphia, Pa.
Metal Saw & Machine Co., Inc. (*)
40 Napier St., Springfield, Mass.
Milwaukee Steam Appliance Co.
1819 S. 71st St., Milwaukee, Wis.
Mitycold Corp.
839 Society for Savings Bldg., Cleveland, O.
Modern Refrigeration Co., Belleville, Ill.
Monroe Refrigeration Engr. Co.
Brockport, N. Y.
Peerless Ice Machine Co. (*)
515 W. 35th St., Chicago, Ill.
Potter Refrigerator Corp. (*)
101 N. 9th St., Portland, Ore.
Reliance Refrigerating Machine Co.
3401 N. Kedzie Ave., Chicago, Ill.
Rice Electric Refrigeration, Inc. (*)
36 Flatbush Ave., Brooklyn, N. Y.
Smith Ice Machine Co. (*)
655 Second Ave., New York, N. Y.
Will P. Stevens (*)
1634 Long Beach Ave., Los Angeles, Calif.
Stewart Ice Machine Co. (*)
1046 E. 22nd St., Los Angeles, Calif.
B. F. Sturtevant Co. (*), Hyde Park, Mass.
Sunbeam Electric Mfg. Co. (*)
Evansville, Ind.
Triumph Ice Machine Co. (*)
110 E. 70th St., Cincinnati, O.
Vilter Mfg. Co. (*)
2217 S. First St., Milwaukee, Wis.
Henry Vogt Machine Co.
10th & Ormsby Sts., Louisville, Ky.
Warner Steel Products Co., Ottawa, Kan.
Weir-Wheelock Co., Inc.
56 Warren St., New York, N. Y.
Welsbach Co. (*), Gloucester City, N. J.
Williams Oil-O-Matic Heating Corp.
Bloomington, Ill.
Wittenmeier Machinery Co. (*)
850 N. Spaulding Ave., Chicago, Ill.
Wolfe Engr. & Sales Corp.
1136 Market St., Harrisburg, Pa.
Worthington Pump and Machinery Corp.
Harrison, N. J.
X. L. Refrigerating Co. (*)
1834 W. 59th St., Chicago, Ill.
York Ice Machinery Corp., York, Pa.
Zerozone Corp.
939 E. 95th St., Chicago, Ill.

COOLING UNITS

Cooling units for domestic, commercial and industrial refrigeration systems, including designs for special applications, such as water coolers, ice cream cabinets, soda fountains, dairy units, bottle coolers and room coolers.

Albright Son & Co. (*)
127 N. Front St., Allentown, Pa.
Alumol Products Corp. (*)
1276 W. Third St., Cleveland, O.
American Engineering Co., Philadelphia, Pa.
Bedell Engineering Co. (*)
2869 W. Pico St., Los Angeles, Calif.
Alphonse Brenner Co., Inc. (*)
1229 Texas Ave., Shreveport, La.
Anheuser, Busch, Inc. (*), St. Louis, Mo.
Associated Piping & Engineering Co., Ltd. (*)
1915 E. 51st St., Los Angeles, Calif.
Brunswick-Kroeschell Co.
New Brunswick, N. J.
Bush Mfg. Co.
100 Wellington St., Hartford, Conn.
Cherry-Burrell Corp.
427 W. Randolph St., Chicago, Ill.
Commercial Refrigerator Mfg. Co., Ltd. (*)
1020 E. 59th St., Los Angeles, Calif.
Copeland Products, Inc.
332 Cass Ave., Mt. Clemens, Mich.
Creamery Package Mfg. Co.
1243 W. Washington Blvd., Chicago, Ill.
Dairy Refrigeration Co.
811 S. 72nd St., Milwaukee, Wis.
Day & Night Water Heater Co., Ltd.
2320 E. Eighth St., Los Angeles, Calif.
Deissler Machine Co. (*)
31 N. Mercer St., Greenville, Pa.
Detroit Lubricator Co. (*), Detroit, Mich.
Drayer & Hanson, Inc. (*)
738 E. Pico St., Los Angeles, Calif.
Esco Cabinet Co., West Chester, Pa.
Feddors Mfg. Co., Inc., Buffalo, N. Y.
Frick Co. (*), Waynesboro, Pa.
Haven Mfg. Co. (*)
530 W. Lapham St., Milwaukee, Wis.

1932 REFRIGERATION DIRECTORY

The 1932 REFRIGERATION DIRECTORY will be published in book form—in handy, reference size, 6 by 9 inches.

No expense is being spared to make it the most complete buyers' guide ever compiled for the industry.

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The contents of the 1932 REFRIGERATION DIRECTORY will include:

1. Classified listing of manufacturers of products
2. Geographical listing of manufacturers
3. Alphabetical listing of manufacturers
4. Alphabetical listing of trade names
5. Statistical and other data

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☐ Attached find descriptive literature of products we manufacture.

☐ Please send advertising rates for 1932 REFRIGERATION DIRECTORY.

Company.....

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Heath & Heath, Inc., Ltd. (*)
1705 S. Hope St., Los Angeles, Calif.
Heinz & Munschaer
20 Superior St., Buffalo, N. Y.
Iceberg Mfg. Co., Gardner, Mass.
International Oil Heating Co. (*)
3808 Park Ave., St. Louis, Mo.
Keokuk Refrigerating Co. (*), Keokuk, Ia.
Kulair Corp. (*)
1428 S. Penn Square, Philadelphia, Pa.
Larkin Warren Refrigerating Corp.
519 Fair St., S. E., Atlanta, Ga.
Liquid Cooler Corp. (*)
6527 Russell St., Detroit, Mich.
McCord Radiator & Mfg. Co. (*)
2587 E. Grand Blvd., Detroit, Mich.
Merchant and Evans Co.
2035 Washington Ave., Philadelphia, Pa.
Metal Saw & Machine Co., Inc. (*)
40 Napier St., Springfield, Mass.
Milwaukee Steam Appliance Co.
1819 E. 71st St., Milwaukee, Wis.
Mullins Mfg. Corp. (*)
605 E. Ellsworth Ave., Salem, O.
National Pipe Bending Co.
111 River St., New Haven, Conn.
Ohio Pipe Bending & Machine Co. (*)
3900 Trent Ave., Cleveland, O.
Peerless Ice Machine Co. (*)
515 W. 25th St., Chicago, Ill.
Philadelphia Pipe Bending Co.
4135 N. Fifth St., Philadelphia, Pa.
Pittsburgh Pipe Coil & Bending Co.
First National Bank Bldg., Pittsburgh, Pa.
Potter Refrigerator Corp. (*)
101 N. 9th St., Portland, Ore.
Reliance Refrigerating Machine Co.
3401 N. Kedzie Ave., Chicago, Ill.
Rome-Turney Radiator Co., Rome, N. Y.
Stewart Ice Machine Co. (*)
1046 E. 22nd St., Los Angeles, Calif.
Sunbeam Electric Mfg. Co. (*)
Evansville, Ind.
Halsey W. Taylor Co., Warren, O.
Thermal Units Mfg. Co.
Pershing Rd. & Loomis St., Chicago, Ill.
Trupar Mfg. Co.
140 Davis Ave., Dayton, O.
Unit Heater & Cooler Co. (*), Wausau, Wis.
Henry Vogt Machine Co.
10th & Ormsby Sts., Louisville, Ky.
D. K. Warner (*), Watkins Glen, N. Y.
Wolverine Tube Co.
1411 Central Ave., Detroit, Mich.
X. L. Refrigerating Co. (*)
1834 W. 59th St., Chicago, Ill.
Zerozone Corp.
939 E. 95th St., Chicago, Ill.

WATER COOLERS

Electrically-refrigerated, self-contained water coolers (or for remote installation when cabinet is included) complete with machine, cooling unit and cabinet. Manufacturers of water cooler cabinets only are also included. Also gas absorption type, self-contained or remote water coolers.

Acorn Opalite-Metal Specialties Co., Inc. (*)
1052 W. Monroe St., Chicago, Ill.
Allen Filter Co. (*)
25 S. St. Clair St., Toledo, O.
Anderson Show Case Mfg. Co. (*)
321 Filmore St., N. E., Minneapolis, Minn.
Brooks Cabinet Co., Inc. (*)
1028 W. 27th St., Norfolk, Va.
Brunswick-Kroeschell Co. (*)
New Brunswick, N. J.
Canton Refrigerators, Inc. (*)
250 W. 49th St., New York, N. Y.
Cir-Cul-Air Refrigerator Corp. (*)
3909 S. Broadway, St. Louis, Mo.
Consolidated Engineering, Ltd. (*)
2146 E. 25th St., Los Angeles, Calif.
Copeland Products, Inc.
332 Cass Ave., Mt. Clemens, Mich.
Cordley & Hayes (*)
145 Hudson St., New York, N. Y.
Cruse Refrigerator Co., Inc. (*)
Louisville, Ky.
Day & Night Water Heater Co., Ltd.
2320 E. Eighth St., Los Angeles, Calif.
Downing Mfg. Co. (*), Downing, Wis.
Drayer & Hanson, Inc. (*)
738 E. Pico St., Los Angeles, Calif.
Eau Claire Cold Storage Corp. (*)
Eau Claire, Wis.
D. A. Ebinger Sanitary Mfg. Co.
401 W. Town St., Columbus, O.
Electrolux Refrigerator Sales, Inc.
Evansville, Ind.
Filtrine Mfg. Co. (*)
53 Lexington Ave., Brooklyn, N. Y.
Frantz Refrigeration Co.
212 Penn St., Reading, Pa.
Frigidaire Corp., Dayton, O.
General Electric Co.
Electric Refrigeration Dept., Hanna Bldg., Cleveland, O.
General Refrigeration Sales Co.
627 Seventh St., Rockford, Ill.
Iceberg Mfg. Co., Gardner, Mass.
International Oil Heating Co. (*)
3808 Park Ave., St. Louis, Mo.
Kelvinator Corp.
14250 Plymouth Rd., Detroit, Mich.
Keokuk Refrigerating Co. (*), Keokuk, Ia.
Kohlenberger Engineering Corp. (*)
805 S. Spadra St., Fullerton, Calif.
C. B. Liver Co. (*)
1510 Capitol Ave., Omaha, Nebr.
Henry G. Loeber Co. (*)
507 Fifth Ave., New York, N. Y.
Lorillard Refrigerator Co. (*)
85 Grand St., Kingston, N. Y.
McCray Refrigerator Co. (*)
Kendallville, Ind.
Monroe Refrigeration Engineering Co.
Brockport, N. Y.
J. Moss & Sons
78 19th St., Brooklyn, N. Y.
Motors Metal Mfg. Co. (*)
5936 Milford Ave., Detroit, Mich.
C. Nelson Mfg. Co.
2300 Division St., St. Louis, Mo.
Northey Mfg. Co. (*), Waterloo, Ia.
O'Keefe and Merritt Co. (*)
3700 Mines Ave., Los Angeles, Calif.
Pechman Store Equipment Co., Inc. (*)
211 W. 19th St., New York, N. Y.
P. B. Polhemus Co. (*)
110 W. 34th St., New York, N. Y.
Potter Refrigerator Corp.
101 N. Ninth St., Portland, Ore.
Refrigerating Equipment Co.
Wilmington, Del.
Robbins & Burke, Inc.
20 Green St., Cambridge, Mass.
Ruddy Mfg. Co., Ltd. (*)
Brantford, Ont., Can.
Savage Arms Corp., Utica, N. Y.
Steel-Craft Mfg. Co. (*)
4617 Arthington St., Chicago, Ill.
Will P. Stevens (*)
1634 Long Beach Ave., Los Angeles, Calif.
United-American Soda Fountain Co. (*)
110 Walnut St., Watertown, Mass.
Unit Heater & Cooler Co. (*), Wausau, Wis.
Universal Cooler Corp.
1214 18th St., Detroit, Mich.
Valade Refrigerator Corp. (*)
6560 Mack Ave., Detroit, Mich.
Valerius Corp. (*), Jefferson, Wis.
A. E. Warwick Co. (*)
14 Franklin St., Stoneham, Mass.
Weber Showcase & Fixture Co., Inc. (*)
5700 Avalon Blvd., Los Angeles, Calif.
White Soda Fountain Co. (*)
220 N. Fourth St., Columbus, O.

ICE CREAM CABINETS

Electrically-refrigerated, self-contained ice cream cabinets (or for remote installation when cabinet is included) complete with machine, cooling unit and cabinet. Manufacturers of ice cream cabinets only are also included. Also gas absorption type, self-contained or remote ice cream cabinets.

Acorn Opalite-Metal Specialties Co., Inc. (*)
1052 W. Monroe St., Chicago, Ill.
Anderson Show Case Mfg. Co. (*)
321 Filmore St., N. E., Minneapolis, Minn.
Anheuser, Busch, Inc. (*), St. Louis, Mo.
Baker Ice Machine Co., Inc. (*)
1518 Evans St., Omaha, Nebr.
Brooks Cabinet Co., Inc. (*)
1028 W. 27th St., Norfolk, Va.
Brunswick-Kroeschell Co.
New Brunswick, N. J.
Campbell Refrigerator Co. (*)
3208 W. Auer Ave., Milwaukee, Wis.
Consolidated Equipment Corp. (*)
Greenville, Mich.
Cruse Refrigerator Co., Inc. (*)
Louisville, Ky.
Deissler Machine Co. (*)
31 N. Mercer St., Greenville, Pa.
Delaware Industries Co. (*)
45 Lake St., Delaware, O.
Drayer & Hanson, Inc. (*)
738 E. Pico St., Los Angeles, Calif.
"Dry-Kold" Refrigerator Co. (*)
Niles, Mich.
Eau Claire Cold Storage Corp. (*)
Eau Claire, Wis.
H. Ehrlich & Sons Mfg. Co. (*)
St. Joseph, Mo.
Electrolux Refrigerator Sales, Inc.
Evansville, Ind.
Eureka Refrigerator Co., Ltd. (*)
Owen Sound, Ont., Can.
I. Fischman & Sons (*)
Erie Ave., F. to G. Sts., Philadelphia, Pa.
Fitz Gibbon & Crisp, Inc. (*), Trenton, N. J.
Frigidaire Corp., Dayton, O.
General Electric Co.
Electric Refrigeration Dept., Hanna Bldg., Cleveland, O.
General Refrigeration Sales Co.
627 Seventh St., Rockford, Ill.
Grand Rapids Cabinet Co.
420 Alabama Ave., N. W., Grand Rapids, Mich.
Grand Rapids Store Equipment Corp.
1545 Madison Ave., Grand Rapids, Mich.
John Herrel & Sons, Inc. (*)
244 Gear St., Columbus, O.
International Oil Heating Co. (*)
3808 Park Ave., St. Louis, Mo.
Kelvinator Corp.
14250 Plymouth Rd., Detroit, Mich.
Keokuk Refrigerating Co. (*), Keokuk, Ia.
Kohlenberger Engineering Corp. (*)
805 S. Spadra St., Fullerton, Calif.
C. B. Liver Co. (*)
1510 Capitol Ave., Omaha, Nebr.
Henry G. Loeber Co. (*)
507 Fifth Ave., New York, N. Y.
Lorillard Refrigerator Co. (*)
85 Grand St., Kingston, N. Y.
McCray Refrigerator Co. (*)
Kendallville, Ind.
Monroe Refrigeration Engineering Co.
Brockport, N. Y.
J. Moss & Sons
78 19th St., Brooklyn, N. Y.
Motors Metal Mfg. Co. (*)
5936 Milford Ave., Detroit, Mich.
C. Nelson Mfg. Co.
2300 Division St., St. Louis, Mo.
Northey Mfg. Co. (*), Waterloo, Ia.
O'Keefe and Merritt Co. (*)
3700 Mines Ave., Los Angeles, Calif.
Pechman Store Equipment Co., Inc. (*)
211 W. 19th St., New York, N. Y.
P. B. Polhemus Co. (*)
110 W. 34th St., New York, N. Y.
Potter Refrigerator Corp.
101 N. Ninth St., Portland, Ore.
Refrigerating Equipment Co.
Wilmington, Del.
Robbins & Burke, Inc.
20 Green St., Cambridge, Mass.
Ruddy Mfg. Co., Ltd. (*)
Brantford, Ont., Can.
Savage Arms Corp., Utica, N. Y.
Steel-Craft Mfg. Co. (*)
4617 Arthington St., Chicago, Ill.
Will P. Stevens (*)
1634 Long Beach Ave., Los Angeles, Calif.
United-American Soda Fountain Co. (*)
110 Walnut St., Watertown, Mass.
Unit Heater & Cooler Co. (*), Wausau, Wis.
Universal Cooler Corp.
1214 18th St., Detroit, Mich.
Valade Refrigerator Corp. (*)
6560 Mack Ave., Detroit, Mich.
Valerius Corp. (*), Jefferson, Wis.
A. E. Warwick Co. (*)
14 Franklin St., Stoneham, Mass.
Weber Showcase & Fixture Co., Inc. (*)
5700 Avalon Blvd., Los Angeles, Calif.
White Soda Fountain Co. (*)
220 N. Fourth St., Columbus, O.

MILK COOLERS

Electrically-refrigerated, self-contained milk coolers (or for remote installation when cabinet is included) complete with machine, cooling unit and cabinet. Manufacturers of milk cooler cabinets only are also included.

Acorn Opalite-Metal Specialties Co., Inc. (*)
1052 W. Monroe St., Chicago, Ill.
Anderson Show Case Mfg. Co. (*)
321 Filmore St., N. E., Minneapolis, Minn.
F. A. Atherton Co. (*)
54 Commercial St., Worcester, Mass.
Baker Ice Machine Co., Inc. (*)
1518 Evans St., Omaha, Nebr.
Banta Refrigerator Co., Inc. (*)
Clearfield, Pa.

Alphonse Brenner Co., Inc. (*)
1229 Texas Ave., Shreveport, La.
Brooks Cabinet Co., Inc. (*)
1028 W. 27th St., Norfolk, Va.
Brunswick-Kroeschell Co.
New Brunswick, N. J.
Campbell Refrigerator Co. (*)
3208 W. Auer Ave., Milwaukee, Wis.
Carbondale Machine Co.
Excelsior Division, P. O. Box "Y"
S. Norwalk, Conn.
Cir-Cul-Air Refrigerator Corp. (*)
3909 S. Broadway, St. Louis, Mo.
Creamery Package Mfg. Co.
1243 W. Washington Blvd., Chicago, Ill.
Cruse Refrigerator Co., Inc. (*)
Louisville, Ky.
Dairy Refrigeration Co.
811 S. 72nd St., Milwaukee, Wis.
Sam Daniels Mfg. Co., Inc., Hardwick, Vt.
Delaware Industries Co. (*)
45 Lake St., Delaware, O.
Domestic Utilities (*)
Garrison Blvd. and Western Md. R. R., Baltimore, Md.
Downing Mfg. Co. (*), Downing, Wis.
Drayer & Hanson, Inc. (*)
738 E. Pico St., Los Angeles, Calif.
"Dry-Kold" Refrigerator Co. (*)
Niles, Mich.
Eau Claire Cold Storage Corp. (*)
Eau Claire, Wis.
H. Ehrlich & Sons Mfg. Co. (*)
St. Joseph, Mo.
Esco Cabinet Co., West Chester, Pa.
Eureka Refrigerator Co., Ltd. (*)
Owen Sound, Ont., Can.
I. Fischman & Sons (*)
Erie Ave., F. to G. Sts., Philadelphia, Pa.
Fresno Show Case & Fixture Co. (*)
1805 Anna St., Fresno, Calif.
Ed Friedrich (*)
1117 E. Commerce, San Antonio, Tex.
Frigidaire Corp., Dayton, O.
Frigidcase (*)
1737 N. Paulina St., Chicago, Ill.
General Electric Co.
Electric Refrigeration Dept., Hanna Bldg., Cleveland, O.
General Refrigeration Sales Co.
627 Seventh St., Rockford, Ill.
Gurney Refrigerator Co. (*)
Fond du Lac, Wis.
Haven Mfg. Co. (*)
530 W. Lapham St., Milwaukee, Wis.
Herrick Refrigerator & Cold Storage Co.
1019 Commercial St., Waterloo, Ia.
C. V. Hill & Co., Inc. (*)
360 Pennington Ave., Trenton, N. J.
International Oil Heating Co. (*)
3808 Park Ave., St. Louis, Mo.
E. A. Kaestner Co. (*)
516 N. Calvert St., Baltimore, Md.
Kelvinator Corp.
14250 Plymouth Rd., Detroit, Mich.
Keokuk Refrigerating Co. (*), Keokuk, Ia.
Koch Butchers' Supply Co. (*)
North Kansas City, Mo.
Kohlenberger Engineering Corp. (*)
805 S. Spadra St., Fullerton, Calif.
Lorillard Refrigerator Co. (*)
85 Grand St., Kingston, N. Y.
McCray Refrigerator Co. (*)
Kendallville, Ind.
Modern Refrigeration Co. (*)
Belleville, Ill.
Monroe Refrigeration Engineering Co. (*)
Brockport, N. Y.
J. Moss & Sons
78 19th St., Brooklyn, N. Y.
Northey Mfg. Co. (*), Waterloo, Ia.
Pechman Store Equipment Co., Inc. (*)
211 W. 19th St., New York, N. Y.
Perfection Cooler Co., Michigan City, Ind.
Fay Rodgers Refrigerator Works (*)
Box 2573, Desoto Sta., Memphis, Tenn.
Serval Sales, Inc., Evansville, Ind.
Steel-Craft Mfg. Co. (*)
4617 Arthington St., Chicago, Ill.
Will P. Stevens (*)
1634 Long Beach Ave., Los Angeles, Calif.
United-American Soda Fountain Co. (*)
110 Walnut St., Watertown, Mass.
Unit Heater & Cooler Co. (*), Wausau, Wis.
Universal Cooler Corp.
1214 18th St., Detroit, Mich.
Valerius Corp. (*), Jefferson, Wis.
Victor Products Corp., Hagerstown, Md.
Welsbach Co. (*), Gloucester City, N. J.

ICE CREAM FREEZER

Electrically-refrigerated, self-contained ice cream freezers (or for remote installation when freezer is included) complete with machine, cooling unit and freezer. Manufacturers of freezers (cabinets) only are also included.

Acorn Opalite Metal Specialty Co., Inc. (*)
1052 W. Monroe St., Chicago, Ill.
Anco Freezer Corp. (*)
5600 Euclid Ave., Cleveland, O.
International Freezer Corp. (*)
300 Straight St., Paterson, N. J.
Mills Novelty Co. (*)
4100 Fullerton Ave., Chicago, Ill.
Raiche Mfg. Co., Los Angeles, Calif.
Taylor Freezer Corp. (*), Beloit, Wis.
Emery Thompson Machine & Supply Co. (*)
271 Rider Ave., New York, N. Y.
White Soda Fountain Co. (*)
220 N. Fourth St., Columbus, O.
Wolfe Engineering & Sales Corp.
1136 Market St., Harrisburg, Pa.

BOTTLE COOLERS

Electrically-refrigerated, self-contained bottle coolers (or for remote installation when cabinet is included) complete with machine, cooling unit and cabinet. Manufacturers of bottle cooler cabinets only are also included.

Acorn Opalite-Metal Specialties Co., Inc. (*)
1052 W. Monroe St., Chicago, Ill.
Anderson Show Case Mfg. Co. (*)
321 Filmore St., N. E., Minneapolis, Minn.
Banta Refrigerator Co., Inc. (*)
Clearfield, Pa.
Brooks Cabinet Co., Inc. (*)
1028 W. 27th St., Norfolk, Va.
Brunswick-Kroeschell Co.
New Brunswick, N. J.
Canton Refrigerators, Inc. (*)
250 W. 49th St., New York, N. Y.
Cir-Cul-Air Refrigerator Corp. (*)
3909 S. Broadway, St. Louis, Mo.
Consolidated Equipment Corp. (*)
Greenville, Mich.
Cruse Refrigerator Co., Inc., Louisville, Ky.

THE CONDENSER

ADVERTISING RATE fifty cents per line (this column only).

SPECIAL RATE if paid in advance—Positions Wanted—fifty words or less, one insertion \$2.00, additional words four cents each. Three insertions \$5.00, additional words ten cents each. All other classifications—fifty words or less, one insertion \$3.00, additional words six cents each. Three insertions \$8.00, additional words sixteen cents each.

POSITIONS WANTED

RADIO District Manager for national manufacturer ten years. Personal selling and sales directing Middle West, Chicago headquarters. Desirous entering refrigeration industry. Personal sales annually exceed one million dollars. Possess complete picture refrigerator jobber and dealer setup Middle West. Qualified to execute all refrigerator and radio merchandising methods. Thorough knowledge of distribution thru jobbing channels. Available October 1st. Box 370.

(IF YOU are considering the manufacture of electric refrigerators or room coolers, I can help you on a consulting basis, giving you the benefit of an unusual combination of engineering, sales-survey and sales experience. H. G. McComb, 2342 N. Kedzie Blvd., Chicago, Ill.

EQUIPMENT WANTED

WE WILL BUY all types of electric refrigerators—new or used—any size—any quantity—Refrigerating Electric Service & Installation Co., 2257 White Plains Ave., Bronx, N. Y. Tel. Olinville 5-1329.

KELVINATOR and Frigidaire parts wanted. Household and commercial. Will purchase in quantities for cash. Good Housekeeping Shop, Kingston, Pa.

United-American Soda Fountain Co. (*)
101 Walnut St., Watertown, Mass.
Valerius Corp. (*), Jefferson, Wis.

ROOM COOLERS

Electrically-refrigerated, self-contained room coolers (or for remote installation when cabinet is included) complete with machine, cooling unit and cabinet. Manufacturers of room cooler cabinets only are also included.

Baker Ice Machine Co., Inc. (*)
1518 Evans St., Omaha, Nebr.
Betz Unit Air Cooler Co.
6 W. 9th St., Kansas City, Mo.
Brunswick-Kroeschell Co.
New Brunswick, N. J.
Copeland Products, Inc.
332 Cass Ave., Mt. Clemens, Mich.
Creamery Package Mfg. Co.
1243 W. Washington Blvd., Chicago, Ill.
Deissler Machine Co. (*)
31 N. Mercer St., Greenville, Pa.
Filtrine Mfg. Co. (*)
53 Lexington Ave., Brooklyn, N. Y.
Frigidaire Corp., Dayton, O.
General Electric Co.
Electric Refrigeration Dept., Hanna Bldg., Cleveland, O.
General Refrigeration Sales Co.
627 Seventh St., Rockford, Ill.
International Oil Heating Co. (*)
3808 Park Ave., St. Louis, Mo.
Kelvinator Corp.
14250 Plymouth Rd., Detroit, Mich.
Milwaukee Steam Appliance Co. (*)
1819 S. 71st St., Milwaukee, Wis.
Smoot-Holman Co. (*)
320 N. Damask St., Inglewood, Calif.
Thermal Units Mfg. Co.
Pershing Rd. & Loomis St., Chicago, Ill.
Unit Heater & Cooler Co. (*), Wausau, Wis.
Universal Cooler Corp.
1214 18th St., Detroit, Mich.
Vilter Mfg. Co. (*)
2217 S. First St., Milwaukee, Wis.
Wittenmeier Machinery Co. (*)
850 N. Spaulding Ave., Chicago, Ill.
York Ice Machinery Corp., York, Pa.

SODA FOUNTAINS

Soda fountains designed for installation with electric refrigeration systems.

Acorn Opalite Metal Specialty Co., Inc. (*)
1052 W. Monroe St., Chicago, Ill.
American Show Case & Mfg. Co.
5235 Grand River, Detroit, Mich.
Bishop & Babcock Mfg. Co. (*)
4901 Hamilton Ave., N. E., Cleveland, O.
Consolidated Equipment Corp. (*)
Greenville, Mich.
I. Fischman & Sons (*)
Erie Ave., F. to G. Sts., Philadelphia, Pa.
Knight Soda Fountain Co. (*)
2701 N. Kildare St., Chicago, Ill.
Liquid Carbonic Corp. (*)
3100 S. Kedzie Ave., Chicago, Ill.
Henry G. Loeber Co. (*)
507 Fifth Ave., New York, N. Y.
Pechman Store Equipment Co., Inc. (*)
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